



**BOOM ARM MOWER**

# **INFORMATION & SERVICE BULLETINS**

Manual P/N 02980501  
(08/05)

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**Alamo Industrial**  
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Seguin, Texas 78155  
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**2005 Edition**

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# INFORMATION & SERVICE BULLETINS INTRODUCTION

## This Book is divided into two Sections

### Section One - Technical Information Bulletins

1. **Technical Information Bulletins:** Information Bulletins are listed by Bulletin Number (Date). Example the oldest Bulletin will be listed first and the most recent bulletin will be listed last. Bulletin No. 021002 = first & second digits are the month, the third & fourth digits are the day of the month and the fifth & sixth digits are the year this means, the bulletin was written on Feb, 10, 2002. If more than one bulletin was written on that day the a dash with a number will added, example -1, -2 etc.
2. **Authorize Repairs:** Technical Information Bulletins **do not authorize** any repairs to be made under warranty or any other circumstance unless specifically instructed to do so.
3. **Bulletin Reference:** Some Technical Information Bulletins will refer to the corresponding Service Bulletins for repairs and some are for information only.
4. **Bulletin Instructions:** Technical Information Bulletins should have all the instructions as to what you need, but may not have all the information needed to make an installation complete. In some cases it may be required to refer to other manuals for more complete information, this should be suggested in the Technical Information Bulletin.
5. All Technical Information Bulletins printed in this Manual will void any previously printed Bulletins. Any changes in these bulletins are the final version as of the date of this manual.

### Section Two - Service Bulletins

1. **Service Bulletin No:** Service Bulletins are listed by Bulletin Number (Date). Example the oldest Bulletin will be listed first and the most recent bulletin will be listed last. Bulletin No. 021004 = first & second digits are the Year, the third & fourth digits are the day of the month and the fifth & sixth digits are the month, this means the bulletin was written on Apr, 10, 2002. If more than one bulletin was written on that day the a dash with a number will added, example -1, -2 etc.
2. **Repairs:** Service Bulletins are intended to authorize only the repairs listed on It to be made under warranty or any other circumstance unless specifically instructed to do so.
3. **Parts:** This is the Rate at which compensation will be allowed under warranty for repair parts.
4. **Labor:** This is the amount of labor (hours) that are allowed to make this repair under warranty.
5. **Parts Disposition:** Service Bulletins list the disposition of any parts that are removed during the repair. If listed removed parts must be held awaiting return to factory if instructed to do so.
6. **Termination Date:** Service bulletins show a termination date, this is the date that the Bulletin will be discontinued, Any repairs must be made and all warranty applications filed by the listed date.
7. All Service Bulletins printed in this Manual will void any previously printed Bulletins. Any changes in these bulletins are the final version as of the date of this manual.

# INDEX

## Machete

### Section 1

## Technical Information Bulletins

| Bulletin No. (Old No.) | Page | Date     | Description  |
|------------------------|------|----------|--|
| -----                  | 1-1  | -----    | Information Bulletins Introduction                 |
| 012095                 | 1-2  | 01/20/95 | Flail Axe Head Pulley Fastener Change              |
| 092895                 | 1-4  | 09/28/95 | Push Pull Switch Adjusting                         |
| 121495                 | 1-6  | 12/14/95 | Repair Cracks in Deck, Rotary Head                 |
| 010896                 | 1-8  | 01/08/96 | Motor Start Switch Circuit                         |
| 020596                 | 1-9  | 02/05/96 | New Piston Pump Control Change                     |
| 032596                 | 1-10 | 03/25/96 | Blade Bar Seal Protector, Rotary Head              |
| 040896                 | 1-12 | 04/08/96 | Oil Leaking from New Hydraulic Cylinders           |
| 042996                 | 1-13 | 04/29/96 | New Holland Tractor Dead Battery Problem           |
| 010397                 | 1-14 | 01/03/97 | Crack in Main Frames / Stiffener Installation      |
| 012097                 | 1-16 | 01/20/97 | Tube Clamp Location Modification                   |
| 031097                 | 1-17 | 03/10/97 | Valve Block to Motor O-Ring Kit                    |
| 032697...(032697A)     | 1-18 | 03/26/97 | Bushing Drivers Available                          |
| 041797-1(041797A1)     | 1-20 | 04/17/97 | Hitch Post Re-Design Update Kit                    |
| 041797-2(041797A2)     | 1-22 | 04/17/97 | Cylinder & Linkage Redesign Kit                    |
| 060197...(060197A)     | 1-24 | 06/01/97 | Tilt Link Arm Stop Modification                    |
| 061897...(061897A)     | 1-25 | 06/18/97 | Blade Bar Leaf Redesign (Rotary Head)              |
| 071797...(071797A)     | 1-26 | 07/17/97 | Joystick Power Supply Cut Off Switch               |
| 100397                 | 1-27 | 10/03/97 | Cyl, Link Arm, Turning Arm, Hitch Post Pins        |
| 112097                 | 1-28 | 11/20/97 | Cyl, Link Arm, Turning Arm, Hitch Post Pins        |
| 120697                 | 1-30 | 12/06/97 | Tilt Function, Lock Valve Installation             |
| 041398                 | 1-32 | 04/13/98 | Erratic Boom Movement, Radio Interference          |
| 020199                 | 1-33 | 02/01/99 | TS Tractor Hood to Frame Interference              |
| 031000                 | 1-34 | 03/10/00 | TS Tractor Fuel Filter Change (New Holland)        |
| 032200-1               | 1-35 | 03/22/00 | Valve, Pressure Side Filter Installation           |
| 080300                 | 1-36 | 08/03/00 | Spindle Oil Filler Kit (Rotary Head)               |
| 080400                 | 1-37 | 08/04/00 | Pressure Filter Maintenance Procedure              |
| 012501                 | 1-38 | 01/25/01 | Control Valve Relocation Information               |
| 040901                 | 1-39 | 04/09/01 | Rebuilt Parts Availability Change Notice           |
| 041001-1               | 1-40 | 04/10/01 | Valve, Pressure Side Filter Installation (Apitech) |
| 041001-2               | 1-41 | 04/10/01 | Valve, Pressure Filter Maintenance Instruction     |
| 041101                 | 1-42 | 04/11/01 | Buzz Bar Head Drive Coupler Change                 |
| 101802                 | 1-43 | 10/18/02 | Spindle Bearing Lubrication Change                 |
| 121802                 | 1-44 | 12/18/02 | Hydraulic Oil Recommendation Change                |
| 021803                 | 1-45 | 02/18/03 | Warranty Repairs with Rebuilt Parts Change         |
| 041503                 | 1-46 | 04/15/03 | John Deere 6000 Tier II Crankshaft Pulley Change   |
| 102103                 | 1-48 | 10/21/03 | Lexan Shield Availability Non-Cab Tractors         |
| 011304                 | 1-50 | 01/13/04 | Driveline Update Kit                               |

# INDEX

## Machete

### Section 2

### Service Bulletins

| Bulletin No. (Old No.) | Page | Date     | Description   |
|------------------------|------|----------|---|
| -----                  | 2-1  | -----    | Service Bulletin Introduction                       |
| 951611... (950011)     | 2-2  | 11/16/95 | Joystick Replacement                                |
| 952911-1 (950014)      | 2-3  | 11/29/95 | Motor To Spindle Bolt Replacement                   |
| 952911-2 (950013)      | 2-4  | 11/29/95 | King Post Pin Replacement                           |
| 962503-1 (960001)      | 2-6  | 03/25/96 | Rear Flap Bracket Update (Rotary Head)              |
| 962503-2 (960002)      | 2-8  | 03/25/96 | Lower Crossmember Installation Update               |
| 962703... (960003)     | 2-9  | 03/27/96 | LH Frame Rail Gusset Reinforcement Update           |
| 962310... (960008)     | 2-10 | 10/23/96 | Lack of Joystick Proportional Movement Control      |
| 960511... (960009)     | 2-11 | 11/05/96 | Tilt Cyl. Function Restrictor Installation          |
| 971903... (970001A)    | 2-12 | 03/19/97 | Turning Arm - King Pin Up-Dates                     |
| 972103... (970002A)    | 2-14 | 03/21/97 | Boom Hinge Point Pin Up-Dates                       |
| 971404... (970004A)    | 2-16 | 04/14/97 | Lift & Dipper Cyl. Function Restrictor Installation |
| 973107... (970008A)    | 2-17 | 07/31/97 | Upper King Pin Bushing Slipping                     |
| 970108... (970009A)    | 2-18 | 08/01/97 | Blade Bolt Inspection / Recall                      |
| 990303... (990002A)    | 2-19 | 03/03/99 | Lower Crossmember Reinforcement Kit                 |
| 992704... (990003A)    | 2-20 | 04/27/99 | New Holland T6640 & T7740 A/C Service Notice        |
| 991911... (990005A)    | 2-21 | 11/19/99 | New Holland TS Tractor Inspection Service Notice    |
| 991012... (990005A)    | 2-22 | 12/10/99 | Turning Arm Pin Update Kit                          |
| 002908... (200004)     | 2-24 | 08/29/00 | Dipper Boom Re-Reinforcement Plate Installation     |
| 000510... (200006)     | 2-25 | 10/05/00 | Control Valve Pressure Filter Installation          |
| 010607... (200102)     | 2-26 | 07/06/01 | Motor Drive Coupler Redesign, Buzz Bar Head         |
| 021202... (021202)     | 2-27 | 02/12/02 | Motor Drive Coupler Up-Date, Buzz Bar Head          |
| 030702... (1020703)    | 2-28 | 02/07/03 | Blade Bolt Inspection and / or Replacement          |
| 050504                 | 2-29 | 05/05/04 | Blade Carrier Retaining Bolts                       |
| 083005-1               | 2-30 | 08/30/05 | Pump Port Plug Replacement                          |

# NOTES

# SECTION 1

## TECHNICAL INFORMATION BULLETINS

(This Book is divided into two Sections)

### Section One - Technical Information Bulletins

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## TECHNICAL INFORMATION BULLETIN No. 012095

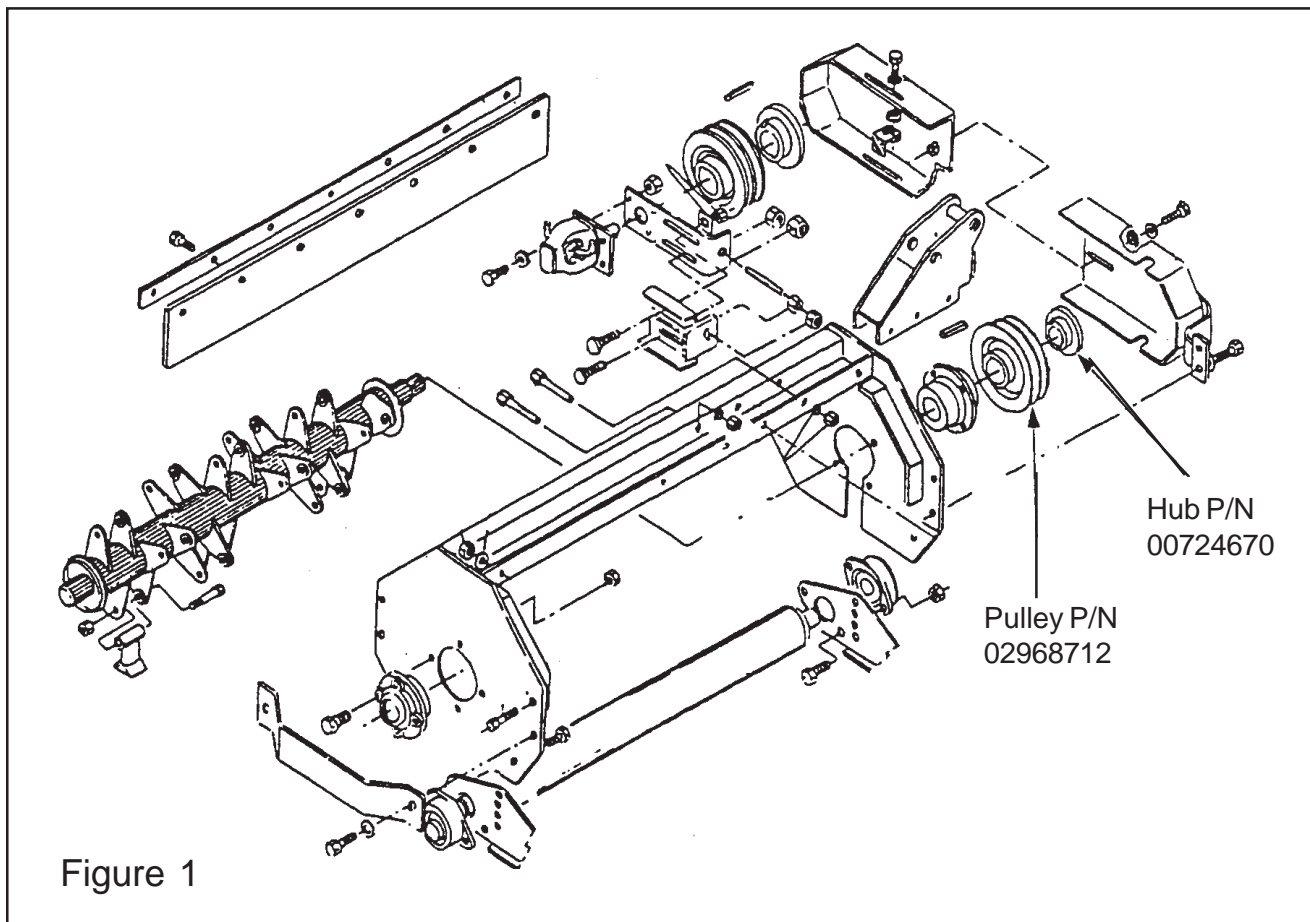
Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|   |                               |                               |
|---|-------------------------------|-------------------------------|
| <b>Models:</b> All Boom Mowers using Flail Axe Head | <b>Bulletin No:</b><br>012095 | <b>Date:</b><br>Jan. 20, 1995 |
|---|-------------------------------|-------------------------------|

### Pulley Fastening to Cutter Shaft of Flail Axe Head:

#### Subject:

A new method has been devised to secure the pulley to the cuttershaft. A new pulley, P/N 02968712 and a QD Pulley Hub P/N 00724670 has replaced the old pulley with setscrew, washer, lockwasher and bolt. The new pulley and hub are a keyed, taper lock design which will provide a better fit and longer service life for the shaft.



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# NOTES



## **TECHNICAL INFORMATION BULLETIN No. 092895**

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1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|  |                                   |                                   |
|--|-----------------------------------|-----------------------------------|
| <b>Models:</b><br>All Hydraulic mowers using the 02964028 Push-Pull Switch | <b>Bulletin No:</b><br><br>092895 | <b>Date:</b><br><br>Sep. 28, 1995 |
|--|-----------------------------------|-----------------------------------|

### **Failures of the mower push-pull switch:**

Alamo has recently received reports of failures of the referenced switch. The failures modes are:

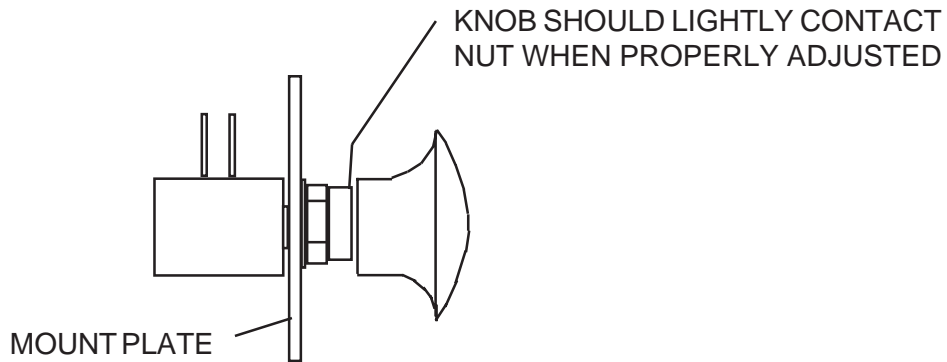
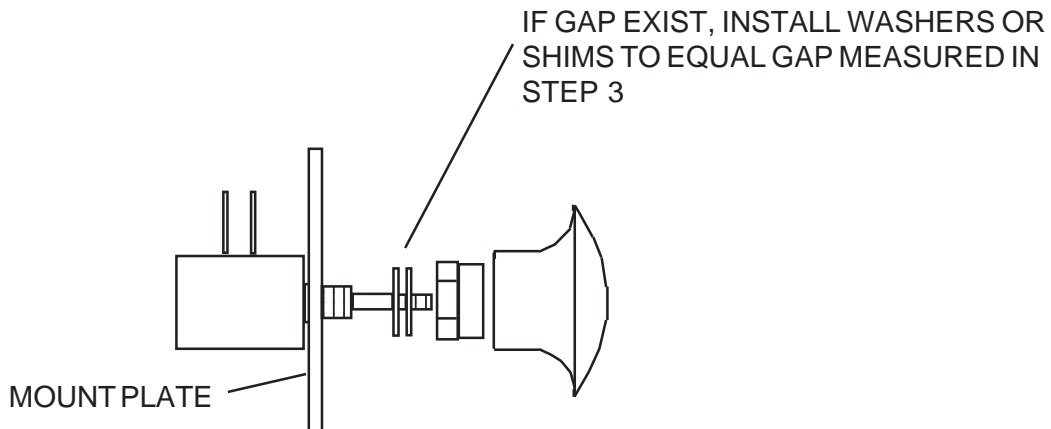
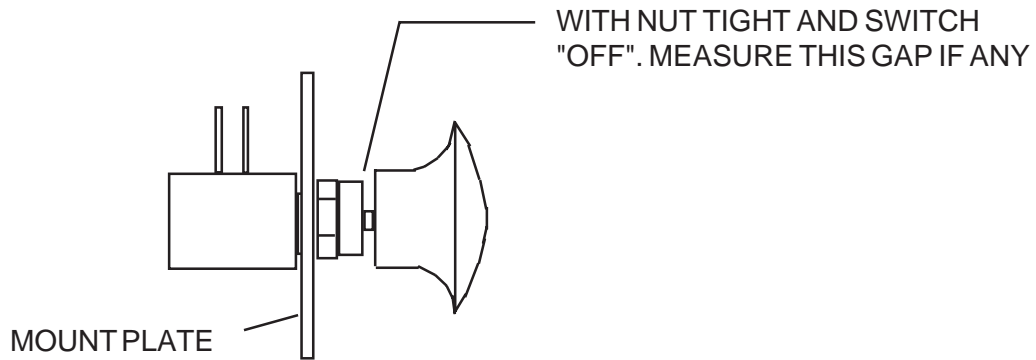
- (a) Knob pulls off rod.
- (b) Rod and Knob pulls out of switch body.

Test performed on numerous switches indicates that the (b) failures are due to excessive force being applied to the knob when shutting off the mower. Specifically, the knobs are usually roughly slapped to turn the mower off. After internal parts of the switch are damaged, the rod can then be pulled out easily. The (a) failures are due to the knobs not being securely tightened.

To prevent these failures from occurring, or to replace a damaged switch, use the following procedure to adjust the travel of the switch. (See attached diagram).

1. Install the switch body in the holder and tighten the nut.
2. Screw the Knob on the rod to the bottom of the thread, but do not overtighten. It will probably be necessary to hold the rod with pliers to get the knob tight, if you do use caution not to score the rod with the pliers.
3. Measure the distance (if any) between the knob and the nut. Record the measurement.
4. If a Gap exists between the knob and the nut, remove the knob.
5. Remove the nut and install the same thickness of flat washers that was measured in step 3. Install and tighten the nut > DO NOT install more washers than needed to take up the space. Flat Washer Part No. 00023500 or equivalent can be used.
6. Install the Knob, using Loctite or similar thread locking compound. Thread the knob on the rod all the way. Test to make sure that when the switch is "Off" (with rod pushed in) that the knob can not travel further into the switch.

**Information Bulletin 092895 Continued from previous Page**



***TECHNICAL INFORMATION BULLETIN***  
***No. 092895***

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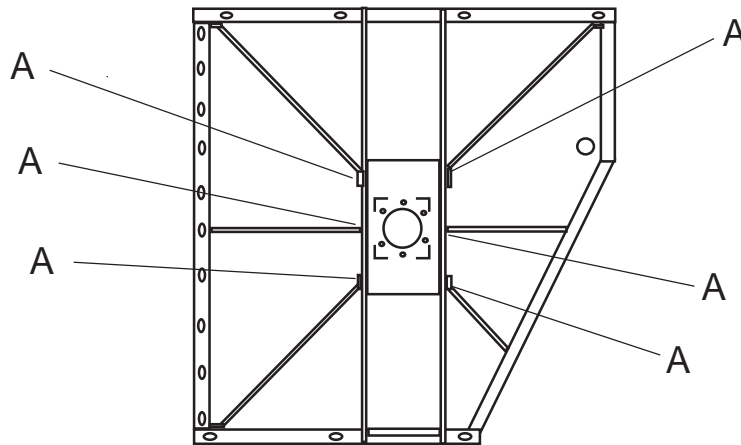


## TECHNICAL INFORMATION BULLETIN No. 121495

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |                               |                               |
|---|-------------------------------|-------------------------------|
| <b>Models:</b><br>Machete Boom Axe, Versa Boom, A-Boom, Slopemower<br>& Rear Mount Booms. | <b>Bulletin No:</b><br>121495 | <b>Date:</b><br>Dec. 14, 1995 |
|---|-------------------------------|-------------------------------|

### Repair Procedure for Welding Cracks in Boom Heads:



If cracks appear in the welds at points "A" as shown above, use the following procedures to repair head.

### Parts Needed:

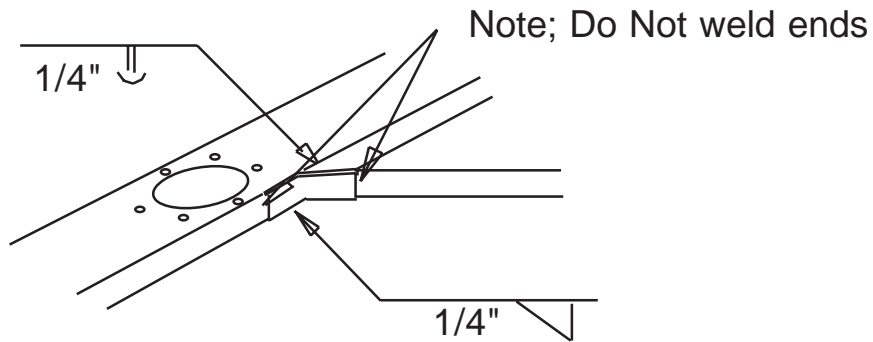
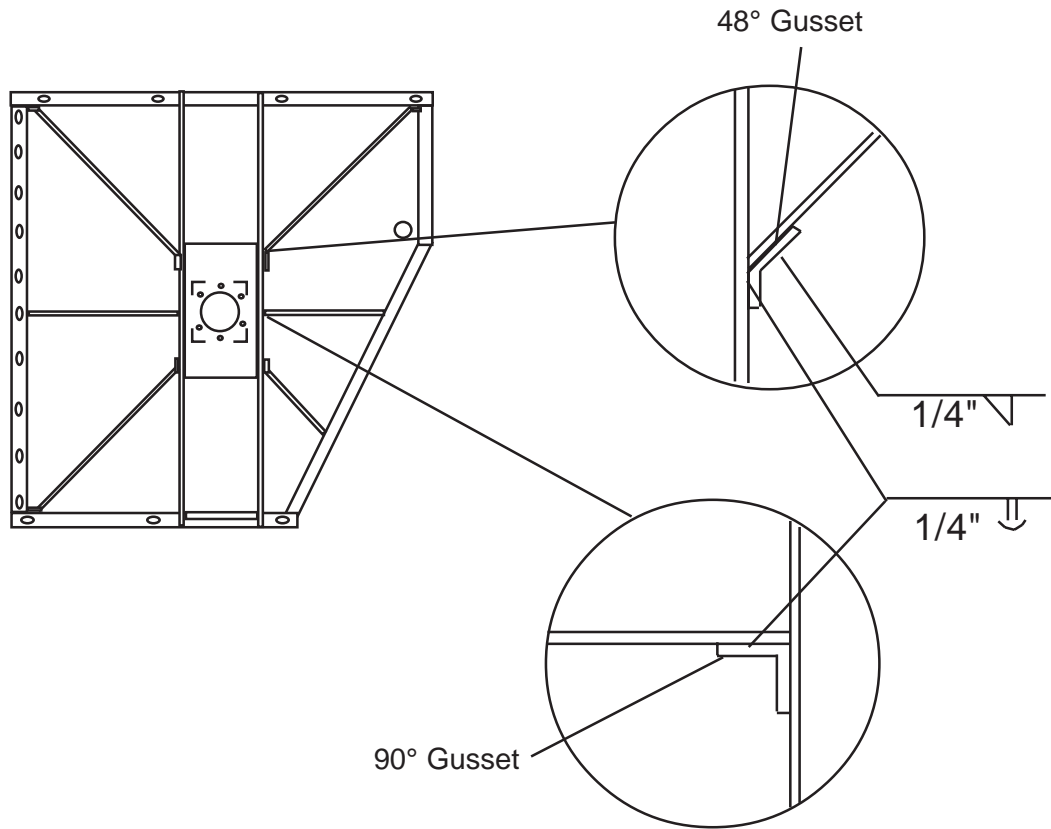
| Part No. | Qty | Description |
|----------|-----|-------------|
| 02970111 | 2   | 90° Gusset  |
| 02970112 | 4   | 48° Gusset  |

### Welding Procedure:

1. Grind a groove at the site of the crack and clean the area to be welded.
2. Weld the crack making a 100% weld.
3. After repairing the cracks, prepare the sites for installation of the gussets.
4. Position the reinforcing bar gusset part no. 02970111 if 90° or part no. 02970112 if 48° over the X-Bar as shown in drawing next page. Weld with a 1/4" fillet weld on the bottom and an edge weld on top. DO NOT weld the ends.
5. Clean and paint the area.
6. Reassemble any parts that were removed.

Continued Next Page

Information Bulletin 121495 Continued from previous Page



**TECHNICAL INFORMATION BULLETIN**  
**No. 121495**

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## TECHNICAL INFORMATION BULLETIN No. 010896

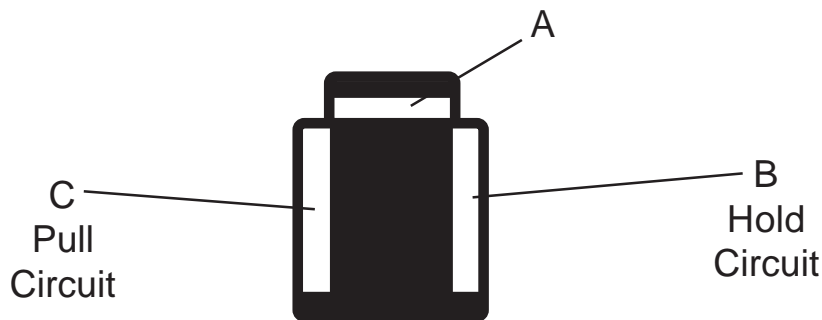
Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|  |                               |                              |
|--|-------------------------------|------------------------------|
| <b>Models:</b> All Machete Boom Mowers | <b>Bulletin No:</b><br>010896 | <b>Date:</b><br>Jan. 8, 1996 |
|--|-------------------------------|------------------------------|

### Trouble shooting improper operation of motor starting circuit:

The correct operation of the motor is for the operator to pull out the Main Motor Switch and then momentarily press the Motor Start Button. the Motor will advance to full operating speed and will continue to run while the Main Motor Switch is in the OUT position.

If the harness is wired wrong, the motor will start as soon as the Motor Start Switch is pulled out without pressing the Motor Start Button.



The above illustration is the female connector of the motor wire harness

#### Corrective Action:

Using needle nosed pliers, push the B and C connectors out of the back of the plug and reinstall them in the opposite positions, or cut the two wires to the B and C connectors and splice them back together reversing them.

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## TECHNICAL INFORMATION BULLETIN No. 020596

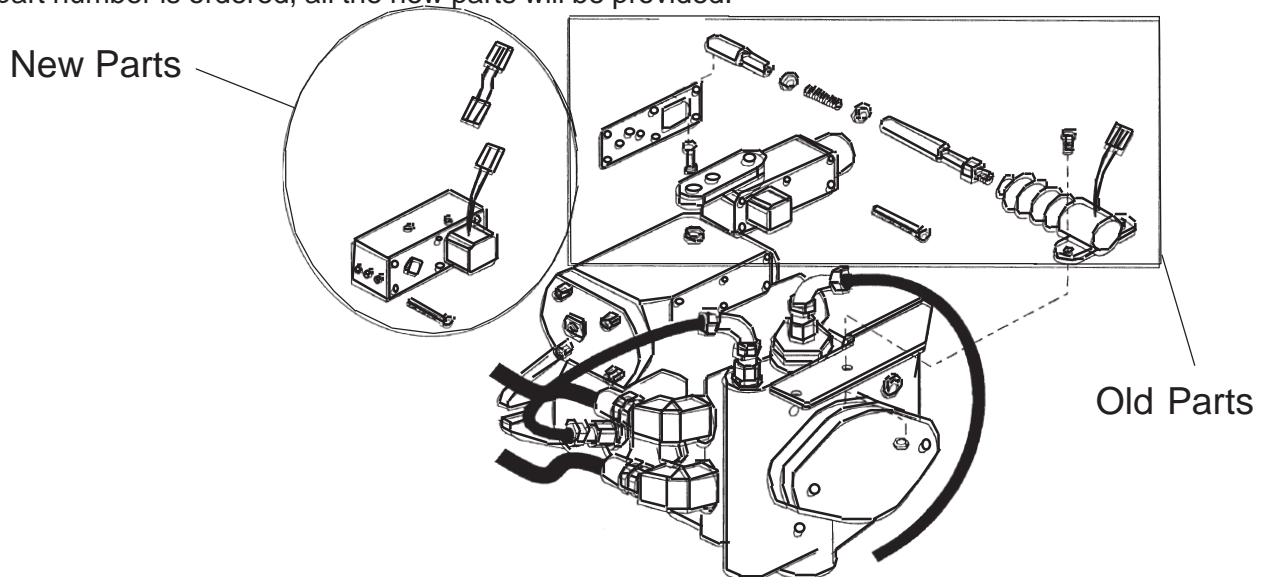
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 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |                               |                              |
|--|-------------------------------|------------------------------|
| <b>Models:</b> Machete Boom Mowers MB21 & MB24 | <b>Bulletin No:</b><br>020596 | <b>Date:</b><br>Feb. 5, 1996 |
|--|-------------------------------|------------------------------|

### New Piston Pump used on Machete:

A new Pump is being used on all Machete Boom Mowers. The new pump utilizes a solenoid valve and manifold (New Parts) to control pump swashplate movement instead of the former (Old Parts) electric solenoid, Spool valve and adjustable linkage. All other parts of the pump remain the same. The new parts provide for more positive trouble free operation of the pump and do not require adjustment.

There will be a harness adapter required to connect the new two wire connector to the old three wire harness. Adapter and instructions are included in replacement parts. When the former (old part number is ordered, all the new parts will be provided.



| Former Part No. | Description   | Replacing Part No.s                          | Description  |
|-----------------|---------------|--|--|
| 02967192        | Pump Assembly | 02969527<br>02970201<br>02970205<br>02970224 | Pump Assembly<br>Decal, Joystick<br>Adapter, Wire Harness<br>Insert, Instruction Sheet |

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## **TECHNICAL INFORMATION BULLETIN No. 032596**

Alamo Industrial Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|   |                                   |                                   |
|---|-----------------------------------|-----------------------------------|
| <b>Models:</b> Machete Boom MB21 & MB24 | <b>Bulletin No:</b><br><br>032596 | <b>Date:</b><br><br>Mar. 25, 1996 |
|---|-----------------------------------|-----------------------------------|

### **New Seal Protector Added to Blade Bar Assembly:**

A few machines have experienced operational problems such as failure of the blade bar to rotate when the mower is engaged or a slight loss of power at the blades. Sometimes it is assumed that the spindle has seized and the spindle is replaced without investigating further.

The problem is usually found to be that the spindle end cap cover is binding on the spindle housing, creating sufficient drag on the shaft to result in the symptoms described above. This condition is a result of material (Vines, Wire, etc.) wrapping around the cover and forcing it to contact and drag against the spindle housing, causing no damage to internal components of the spindle.

A new seal protector has been designed to aid in preventing material from wrapping around the seal cover area. While nothing can completely prevent material from getting to the seal cover, the new seal protector should greatly reduce the probability of spindle seizures due to these causes.

If a machine is operating or is going to operate in an application in which material is likely to wrap around spindle, the following parts can be ordered and installed. The old seal protector (# 02968868) which is on the spindle will be removed and discarded. The Old Part No. 02968868 will be ordered but the new Seal Protector Part No. 02970459 will be shipped with installation instructions. If only the new Seal protector is ordered the instruction sheet will not be shipped.

| Part No. | Qty | Description                     |
|----------|-----|---------------------------------|
| 02968868 | 1   | Cover, End Cap (Seal Protector) |

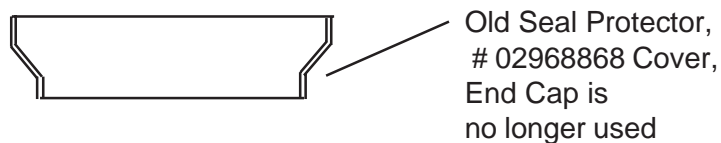
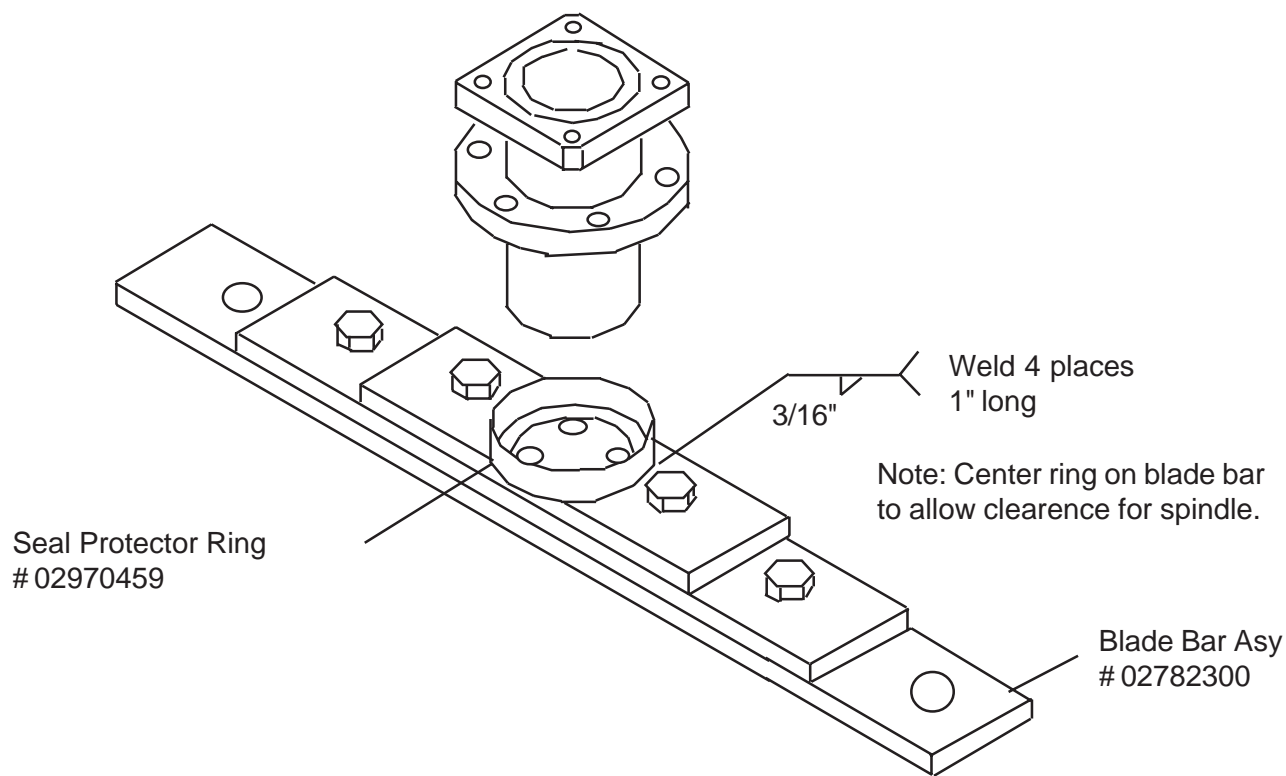
The new seal protector will have to be welded to the upper blade bar as shown on the next page and the old seal protector which is on the spindle will be discarded. Make sure that the Blade bar retaining bolts are properly torqued when reattaching to spindle and that components are good condition.

Continued Next Page

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Information Bulletin 032596 Continued from previous Page



**TECHNICAL INFORMATION BULLETIN**  
**No. 032596**

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## **TECHNICAL INFORMATION BULLETIN No. 040896**

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|  |                                   |                                  |
|--|-----------------------------------|----------------------------------|
| <b>Models:</b> All Models using Single Acting Hydraulic Cylinder | <b>Bulletin No:</b><br><br>040896 | <b>Date:</b><br><br>Apr. 8, 1996 |
|--|-----------------------------------|----------------------------------|

### **Oil Leaking from new single Acting Hydraulic Cylinders:**

There have been numerous cases of the dealers and customers replacing single acting hydraulic cylinders on new machines due to oil leakage out of the vent plug in the cylinder.

In many of these instances, no defect could be found in the cylinders. Further investigation has revealed that the manufacture of our cylinders is leaving oil in the cylinders after their testing. The Oil is left to help protect the interior of the cylinders during storage. When the cylinders are fully actuated, they are forcing this oil out the vent plug, causing what appears to be a leaking cylinder through the vent plug. Even the oil is cleaned off the cylinder after testing there is enough oil still inside the cylinder to bleed out when used.

If you have a New Cylinder that appears to be leaking from the vent plug, The oil should be cleaned off and unit ran for a few days to a week to determine if the Cylinder is leaking, or if it is the oil that was left in the cylinder to protect it. It has been found that in some cases it has taken as much as a week for this to appear that it is not leaking.

If after running and cycling the cylinder during operation and the cylinder continues to leak then the necessary repair should be performed.

Cylinders that are attracting dust around them is not considered to be leaking. This dust collecting around them is considered normal.

All Cylinder that are returned as leaking will be pressure tested for leakage to determine the condition of the Cylinder and its components.

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1-12



## TECHNICAL INFORMATION BULLETIN No. 042996

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1502 East Walnut  
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830-372-2708

|   |                                   |                                   |
|---|-----------------------------------|-----------------------------------|
| <b>Models:</b> All New Holland Tractors with Alamo Industrial Mounted Booms | <b>Bulletin No:</b><br><br>042996 | <b>Date:</b><br><br>Apr. 29, 1996 |
|---|-----------------------------------|-----------------------------------|

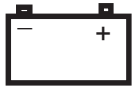
### Dead Batteries on New tractors:

There have been several reports recently of dealers receiving machines with dead batteries, some of which could not be satisfactorily recharged. Please see the attached copy of a tag which is coming with the new tractors.

The "small electrical discharge" being mentioned amounts to a constant drain on the battery. If the battery cable (+ Post) is left connected for a long enough time with the tractor inactive, the battery will become sulfated (permanently damaged) and will not accept a charge. Sulfated batteries are not warranted through the battery manufacturer.

At present, the only alternative to removing the battery cable would be to install a battery disconnect switch in the negative cable, which would allow the battery to be easily isolated. These switches are available at most major tractor dealers. USE CAUTION when installing anything on battery cables, disconnect the positive cable before installing disconnect switch and make sure after switch is installed that it is "OFF" before reconnecting Positive Cable.

**ATTENTION ! BATTERY CARE**



Your new Tractor has electronics which cause a very small electrical demand on the battery. If the tractor is not in use for an extended period, disconnect battery to avoid damage by excessive discharge.

Recharge Battery if voltage is less than 12.3V (S.G. less than 1.140)  
Lataa Akku uudelleen, jos jännite on alle 12.3V (ominaispaino alle 1.140)  
Ricaricare la batteria se il voltaggio è inferiore a 12.3V (G.S. inferiore a 1.140)  
Bateria recarregavel se a voltagem for inferior a 12.3V (Gravidade específica inferior a 1.140)  
Laddt de batterijweer op wanneer de voltage lager is dan 12.3V (S.G. Minder dan 1.140)  
Recharger la batterie si la tension est inférieure a 12.3V (Densité inférieure a 1.140)  
Batterie wieder aufladen, wenn spannung unter 12.3V (Spez gewicht unter 1.1.40 IST)  
Recargar la batería si el voltage es inferior a 12.3V (S.G. inferior a 1.1.40)  
Batteriet må lades opp hvis spenningen er mindre enn 12.3V (Spesifikk vekt under 1.1.40)

Part No. 82001815

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MACHETE



# TECHNICAL INFORMATION BULLETIN No. 010397

Alamo Industrial Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

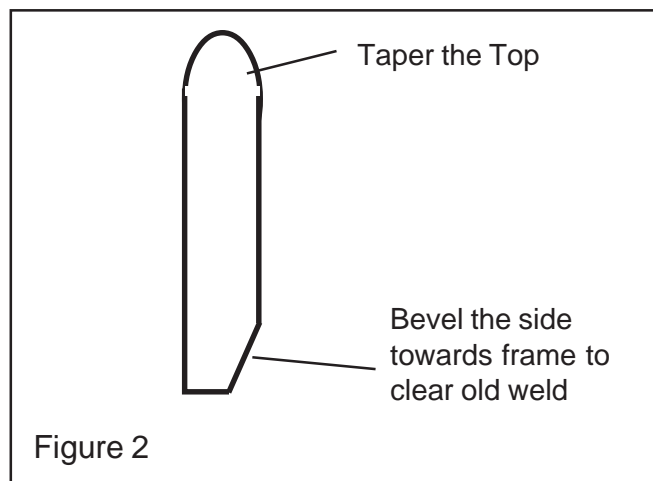
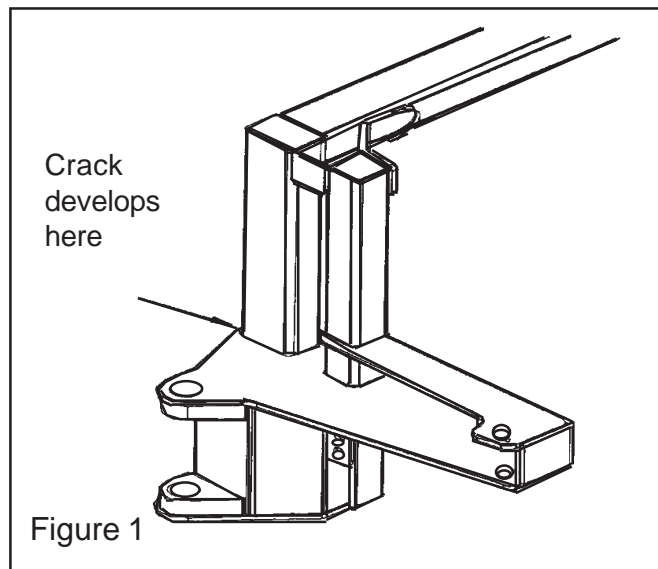
|   |                               |                              |
|---|-------------------------------|------------------------------|
| <b>Models:</b> Machete Boom MB21 & MB24 | <b>Bulletin No:</b><br>010397 | <b>Date:</b><br>Jan. 3, 1997 |
|---|-------------------------------|------------------------------|

## Cracks in Main Frame:

There have been some cracks in the main frame of some machete mowers

If a crack should develop (See Figure 1), use the following procedure to make repairs until a permanent repair is developed. NOTE: This repair will allow the machine to continue operating while a long term correction for the problem is being developed.

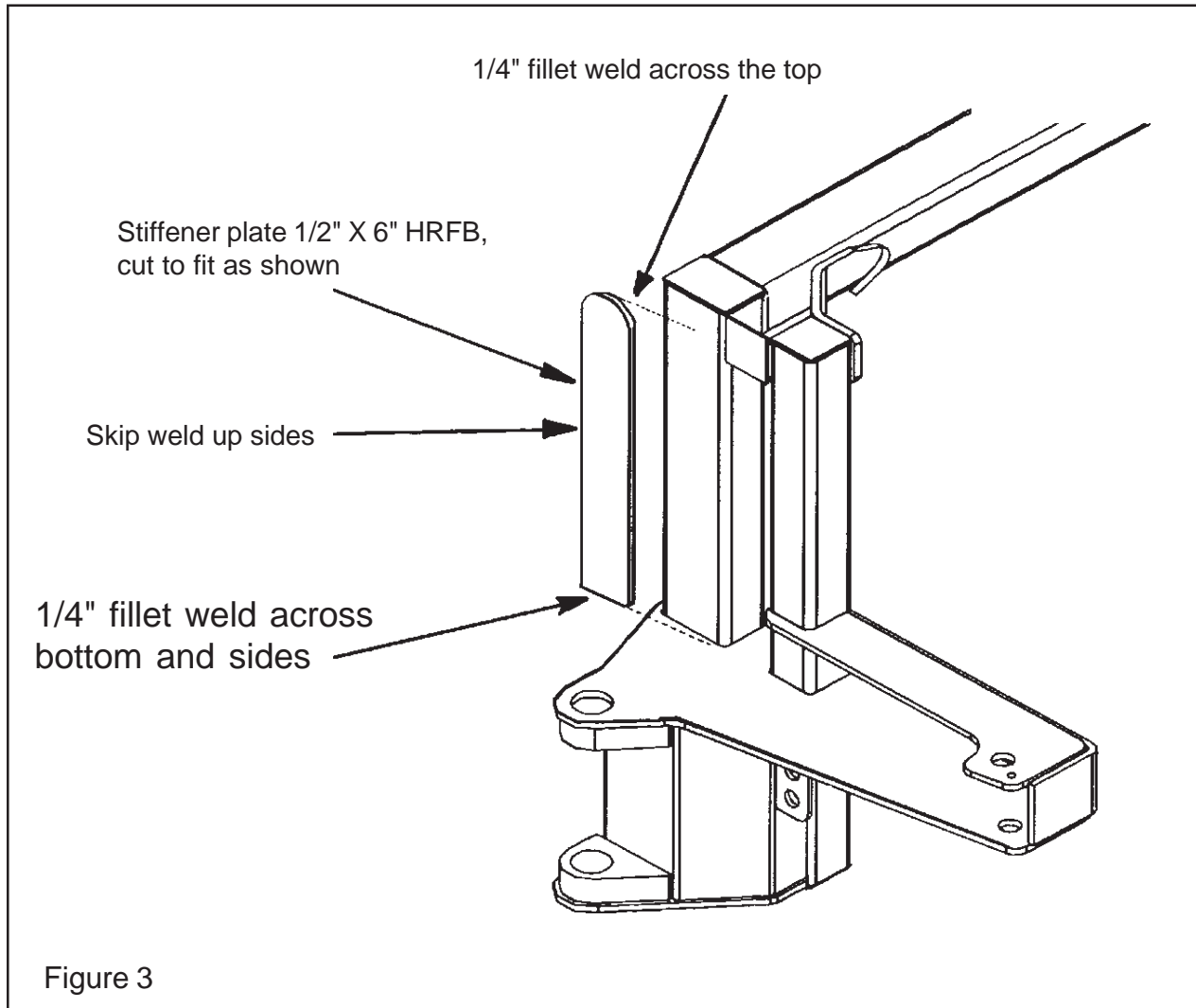
1. Grind out old weld (crack) and weld the crack, Do not use an excessive high repair weld as you will need to grind repair weld down smooth.
2. Prepare a piece of 1/2" X 6" HRFB cut to length (See Figure 2). The bottom should rest against the King Post frame and the top should be within 2" of the top of the frame, this will determine the height of the repair plate (See Figure 3). Bevel the bottom side of the plate that is towards the frame to allow for the old weld. This will be evident if you test fit the repair plate.
3. Place the stiffener repair plate against the vertical member of frame (as shown in figure 3) and tack weld into position, Make sure repair plate is flat against the frame.



Continued Next Page

## Information Bulletin 010397 Continued from previous Page

4. Weld the plate as described in figure 3
5. After welding is complete, clean weld and immediate area. Paint the area around the repair and around any area where the paint was damaged from making this repair.



## **TECHNICAL INFORMATION BULLETIN No. 010397**

Contact:  
Alamo Industrial  
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## TECHNICAL INFORMATION BULLETIN No. 012097

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|                                     |                               |                               |
|-------------------------------------|-------------------------------|-------------------------------|
| <b>Models:</b> Machete, MB21 & MB24 | <b>Bulletin No:</b><br>012097 | <b>Date:</b><br>Jan. 20, 1997 |
|-------------------------------------|-------------------------------|-------------------------------|

### Interference between Tube Clamps and Main Frame:

It is possible that the boom hydraulic tube clamps may contact the main frame when boom is raised to its highest position. This condition effects only machines with certain frames. If you have a machine that has this interference problem use the procedures described in this bulletin to correct the problem. (See Figure 1).

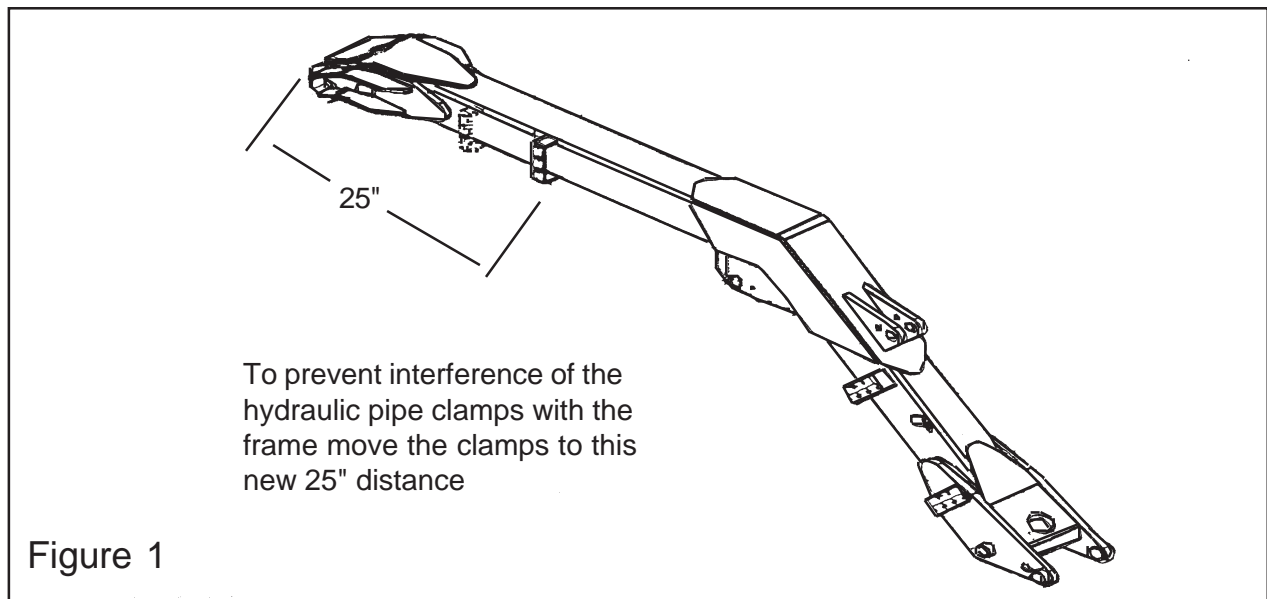


Figure 1

If the parts on your unit are damaged, loosen the six bolts that hold the three tubes. Cut the bracket away from the boom. Relocate the bracket on the boom so it clears the frame. Weld in place and paint. Tighten the six bolts. Total time to perform this modification will be approximately 1.5 hours time or less. If parts are required there is a kit that can be installed, the Kit # 02971938.

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1-16



# TECHNICAL INFORMATION BULLETIN No. 031097

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|  |                                   |                                   |
|--|-----------------------------------|-----------------------------------|
| <b>Models:</b> Machete, MB21 & MB24<br>&<br>Brahma Side Mount models | <b>Bulletin No:</b><br><br>031097 | <b>Date:</b><br><br>Mar. 10, 1997 |
|--|-----------------------------------|-----------------------------------|

## Valve Block O-Ring Replacement Kit available:

A kit (Kit # 02972094) to replace the O-Ring and Back-up Rings which are located between the valve block and the motor housing on the piston motors # 02977193 used on the Brahma rotary and Machete boom mounted cutters is available. The Valve block must be removed when the motor is replaced as it is attached to the support plate. This causes an occasional failure of the seals.

Install O-Rings and Back-up Rings on the valve block. The High Pressure Ports require an O-Ring and Back-up Ring. The O-Ring goes on first (against valve block), then the Back-up ring (against motor) as shown (See Figure 1). Install the Square-Cut Ring in the Low Pressure Drain Port of the valve block.

When installing the valve block the retaining bolts to the motor they must be torqued to 35 ft. lbs. in an alternating pattern.

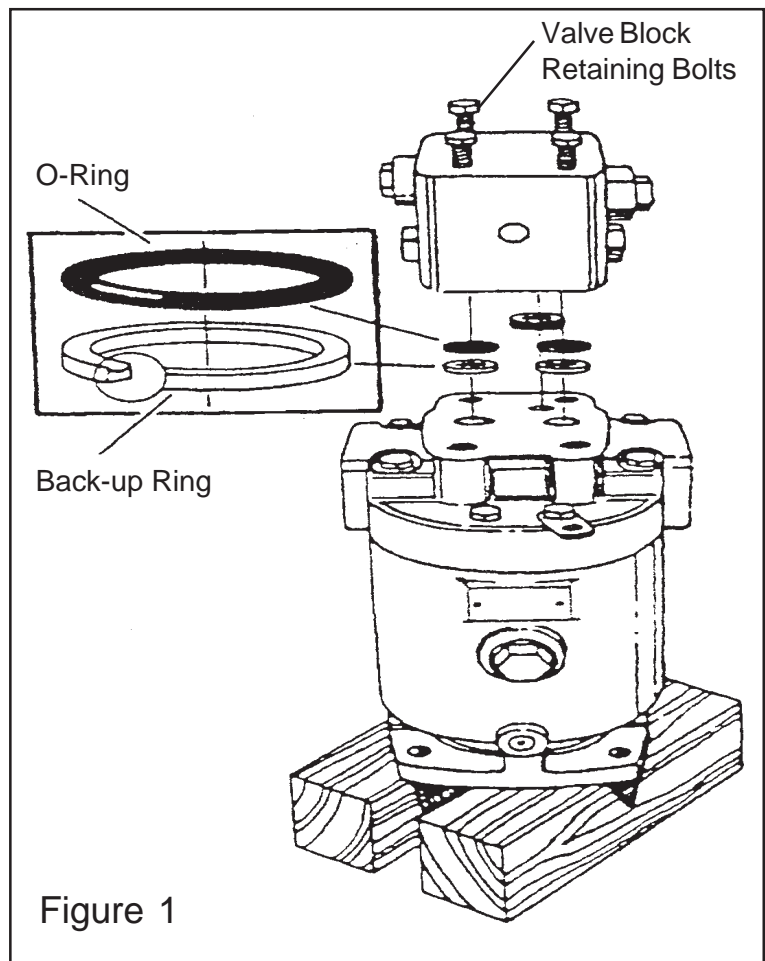


Figure 1

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## TECHNICAL INFORMATION BULLETIN No. 032697

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|                                     |                               |                               |
|-------------------------------------|-------------------------------|-------------------------------|
| <b>Models:</b> Machete, MB21 & MB24 | <b>Bulletin No:</b><br>032697 | <b>Date:</b><br>Mar. 26, 1997 |
|-------------------------------------|-------------------------------|-------------------------------|

### King Pin and Boom Pin Bushing Drivers Available:

It is now possible to obtain the proper bushing driver to facilitate the installation of all bushings on the Machete Boom Assembly. The Large Driver (P/N 02972281) is used to install the King Pin Bushings in the frame, while the Small Driver (P/N 02972282) should be used to install all the bushings in the boom. These tools may be used to install bushings on several other Alamo Industrial Models such as Slope Mowera and A-Booms. The proper use of the installation tools will help to prevent damage to the bushing surfaces during installation.

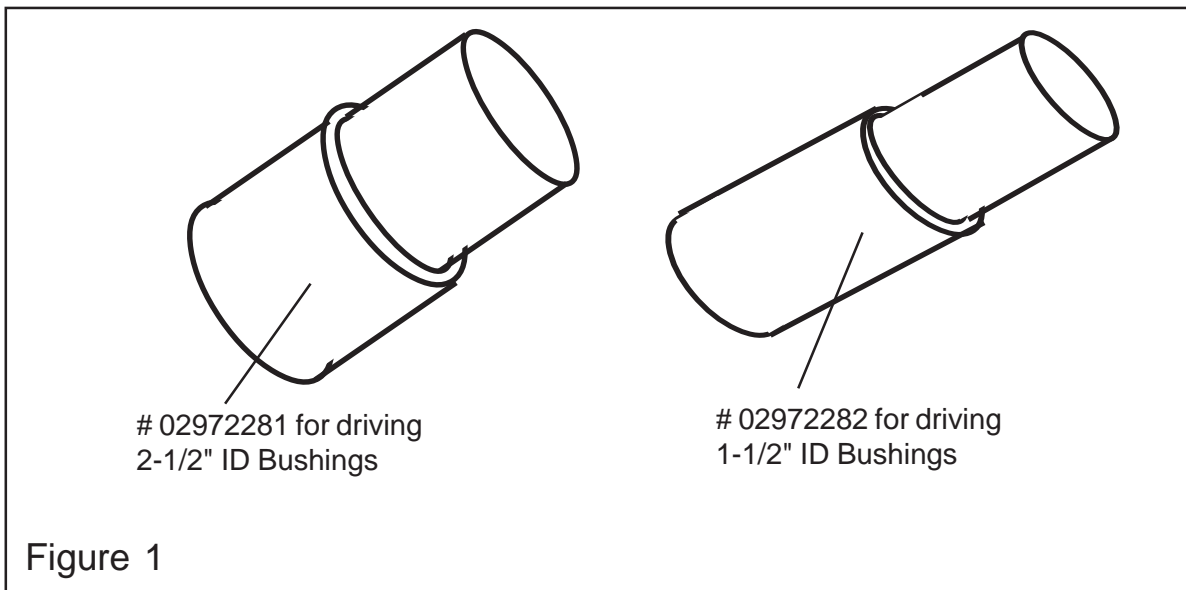


Figure 1

Note: Replaces / Same as Bulletin No. 032697A

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1-18



# NOTES



# TECHNICAL INFORMATION BULLETIN No. 041797-1

Alamo Industrial™ Technical Services Department  
 1502 East Walnut  
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 830-372-2708

|                                     |                                     |                                   |
|-------------------------------------|-------------------------------------|-----------------------------------|
| <b>Models:</b> Machete, MB21 & MB24 | <b>Bulletin No:</b><br><br>041797-1 | <b>Date:</b><br><br>Apr. 17, 1997 |
|-------------------------------------|-------------------------------------|-----------------------------------|

## Hitch Post Replacement Kits:

Hitch Post replacement kits are now available for Machete Boom models MB21 & MB24. The new design utilizes an 8 bolt flange design which requires angle braces to be welded to the cutter head. If you are experiencing problems with the original hitch post, it could be replaced with the new design. Install the new Hitch Post using the following procedure.

Important ! Any warranty repairs must be done in accordance with warranty policy and service bulletin SB No. 970002A only.

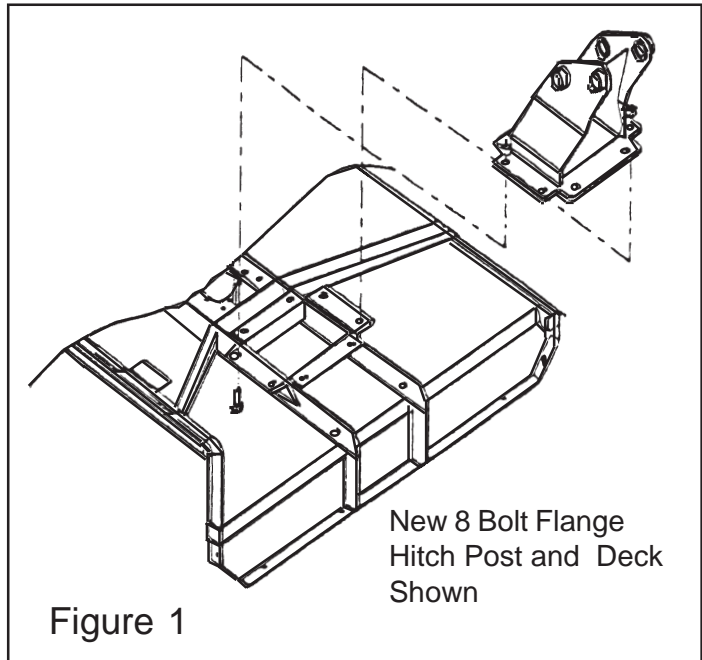
### Hitch Post Replacement Kits: (Qty use 1 each)

| Part No. | Description       |
|----------|-------------------|
| 02972231 | Hitch Post Kit    |
| 02967691 | Pin Kit           |
| 02967687 | Pin Kit           |
| 02972232 | Instruction Sheet |

Note: Instruction Sheet is included in Kit.

### Repair Procedures:

1. Remove Head from Boom by following cutting head removal & install instructions in the Operators Parts manual. If you do not have this manual it is recommended you obtain one before proceeding with this repair.
2. Remove the old Hitch Post from the head. Clean all debris and Oil off of deck. Clean the paint off around the area where the new flange will be welded.
3. Place angles (02971946 & 02972111) on rotary head as shown in Figure 2 and Figure 3. All measurements are to be taken from the edge of the 3/8" X 3" ribs running across the rotary head.



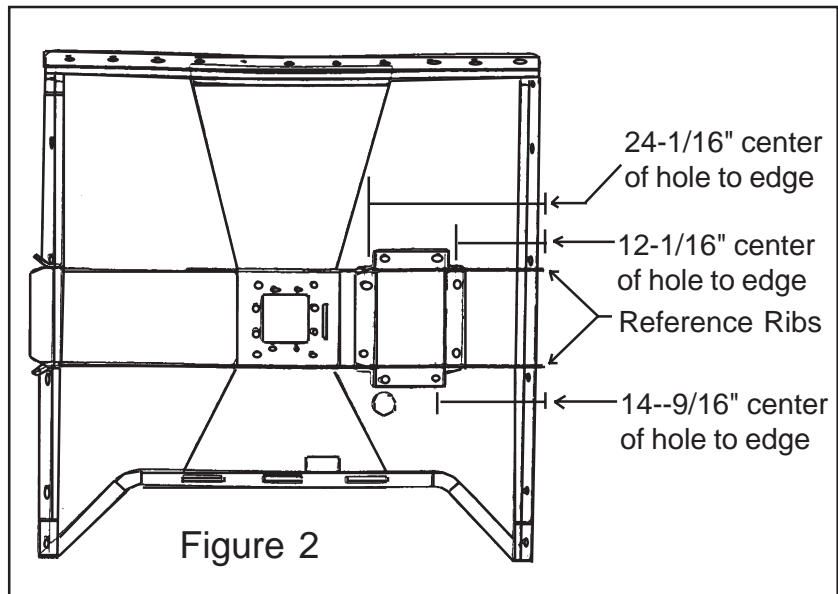
Continued Next Page

## Information Bulletin 041797-1 Continued from previous Page

4. After aligning the Angles to Deck (See Figure 2) tack weld them in place. Recheck all measurements and alignments, then weld in flanges in place.

5. Clean all welds and area around welds, remove weld slag, burnt paint and etc. Repaint complete area around flanges to prevent rust.

6. Attach new Hitch Post (02971928) to welded angles as shown in Figure 3 using hardware furnished with kit. Install the Lock nut on top of the Hitch post and the bolt heads down coming up through the flanges, this will give the maximum strength to the bolts and Hitch components.



7. Reinstall Head to Boom by following cutting head removal & install instructions in the Operators Parts manual. If you do not have this manual it is recommended you obtain one before proceeding with the reinstall of head.

### Hitch Post Kit # 02972231 includes -

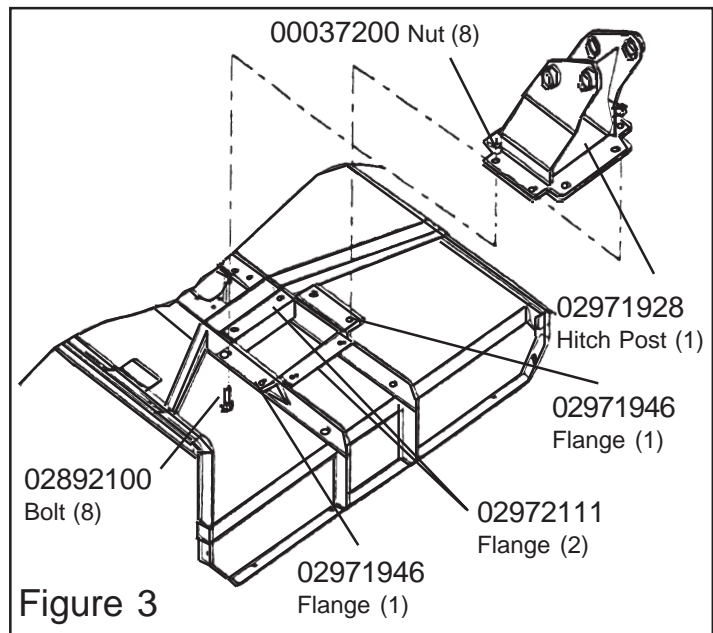
| Part No. | Qty | Description       |
|----------|-----|-------------------|
| 02971928 | 1   | Hitch Post        |
| 02972111 | 2   | Angle             |
| 02971946 | 2   | Angle             |
| 02892100 | 8   | Bolt              |
| 00037200 | 8   | Locknut           |
| 02972232 | 1   | Instruction Sheet |

### Pin Kit # 02967691 includes -

|          |   |                   |
|----------|---|-------------------|
| 02971756 | 1 | Pin, Chrome       |
| 02971746 | 1 | Bushing           |
| 02970595 | 1 | Bolt              |
| 00015800 | 1 | Locknut           |
| 02971904 | 1 | Instruction Sheet |

### Pin Kit # 02967687 includes -

|          |   |              |
|----------|---|--------------|
| 02971720 | 1 | Pin Weldment |
| 02971701 | 1 | Nut, Slotted |
| 02971702 | 1 | Flat Washer  |
| 165020   | 1 | Cotter Pin   |



Note: Replaces / Same as Bulletin No. 041797A1

# TECHNICAL INFORMATION BULLETIN No. 041797-1

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# TECHNICAL INFORMATION BULLETIN No. 041797-2

Alamo Industrial™ Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|                                     |                                     |                                   |
|-------------------------------------|-------------------------------------|-----------------------------------|
| <b>Models:</b> Machete, MB21 & MB24 | <b>Bulletin No:</b><br><br>041797-2 | <b>Date:</b><br><br>Apr. 17, 1997 |
|-------------------------------------|-------------------------------------|-----------------------------------|

## Cylinder & Linkage Pin Replacement Kits:

Boom cylinder pin replacement kits for all Machete MB21 & MB24 mowers are now available. The new design utilizes a Boss and Bolt arrangement to replace the original tear drop and bolt design. Each kit contains all the necessary parts along with a detailed instruction sheet regarding the correct replacement procedure for the pins. Likewise, if new pins are ordered in the future, the original part numbers will be automatically replaced with the new design being shipped to you. Welding and painting will be required.

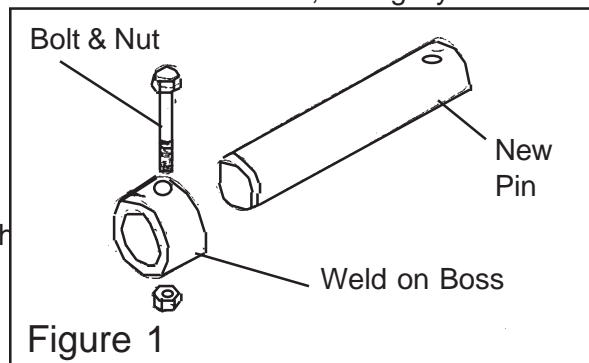
If you are experiencing problems with the original pin design. Order the new kit and replace the pins with the new design. Instruction Sheet # 02971904 will be sent with each kit ordered. This instruction sheet will show detailed instructions on how to install the following kits.

If replacing these as warranty, follow all warranty procedures in accordance with warranty guide and Service Bulletins which apply to this application only.

### Kit Numbers:

| Kit No.   | Qty | Description                         | Kit No.  | Qty | Description                   |
|-----------|-----|-------------------------------------|----------|-----|-------------------------------|
| 02967685  | 1   | Pin Kit, Dipper Cyl. Rod End        | 02967691 | 2   | Pin Kit, Head Tilt Linkage    |
| 02967673  | 1   | Pin Kit, Swing Cyl. Barrel End      | 02967694 | 1   | Pin Kit, Tilt Cyl. Rod End    |
| 02967677* | 1   | Pin Kit, Lift Cyl. Rod End          | 02967683 | 1   | Pin Kit, Tilt Cyl. Barrel End |
| 02967677* | 1   | Pin Kit, Dipper Cyl. Barrel End     | 02967675 | 1   | Pin Kit, Swing Cyl. Rod End   |
| 02967679  | 1   | Pin Kit, Lift Cyl. Barrel End       |          |     |                               |
| 02967681  | 1   | Pin Kit, Link Arm to Dipper         |          |     |                               |
| 02967694  | 1   | Pin Kit, Link Arm to Linkage        |          |     |                               |
| 02966791  | 1   | Pin Kit, Linkage Asy to Hitch Post. |          |     |                               |
| 02868803  | a/r | Pin Bushing                         |          |     |                               |

Note: there is also a Turning Arm Upgrade Kit which includes a new 1 piece king pin, All Bushings and Turning arm (Kit # 02972211) which is not shown here.



Continued Next Page

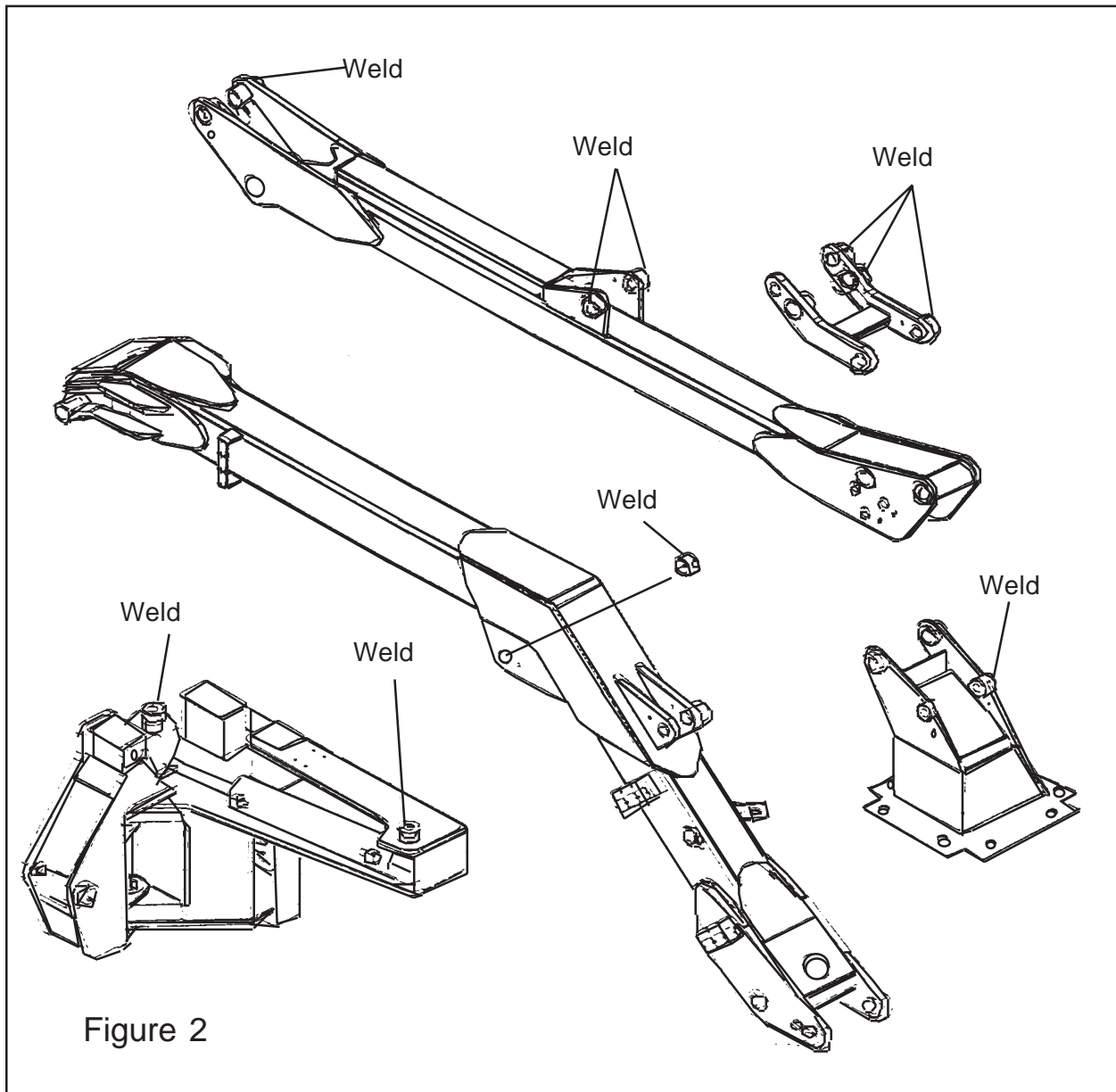


Figure 2

Note: Replaces / Same as Bulletin No. 041797A2

**TECHNICAL INFORMATION BULLETIN**  
**No. 041797-2**

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# TECHNICAL INFORMATION BULLETIN No. 060197

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|                                     |                                   |                                  |
|-------------------------------------|-----------------------------------|----------------------------------|
| <b>Models:</b> Machete, MB21 & MB24 | <b>Bulletin No:</b><br><br>060197 | <b>Date:</b><br><br>Jun. 1, 1997 |
|-------------------------------------|-----------------------------------|----------------------------------|

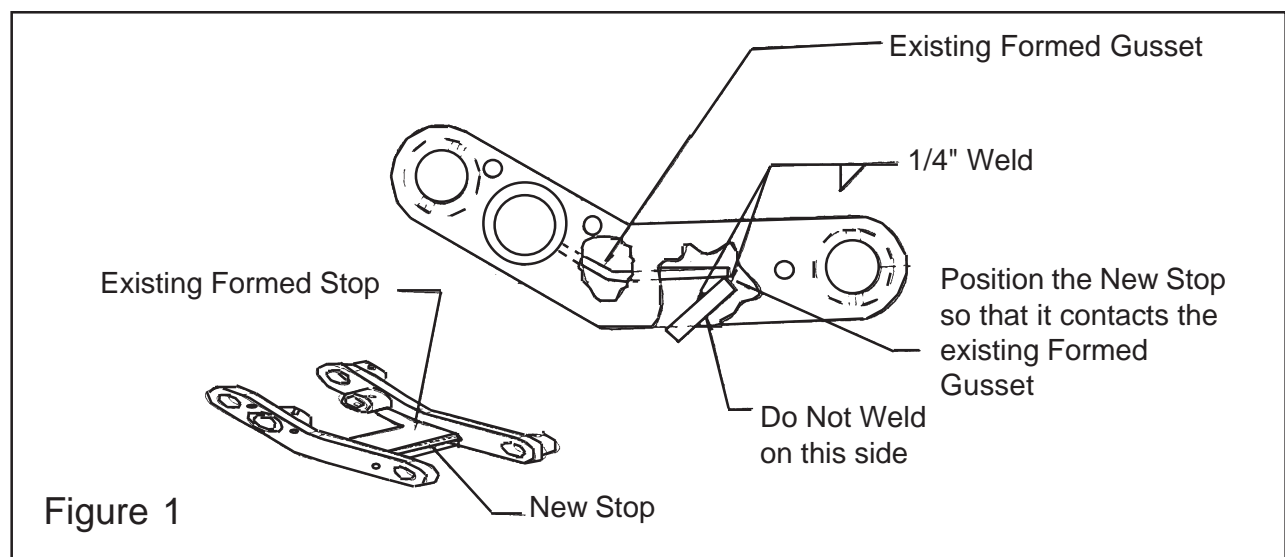
## Tilt Link Arm Stop:

Some Machete models may exhibit interference between the head tilt cylinder and the cutter motor support plate. This can result in a bent head tilt cylinder rod, a damaged cylinder gland cap, or a damaged cutter motor housing.

In order to avoid possible damage, a stop should be fabricated and installed which will limit the head tilt retraction before interference occurs.

A stop made from 1/2" X 2-1/4" HRFB X 6-1/2" long should be welded to head tilt link arm weldment as shown in figure 1. This will require welding and painting.

To locate the proper angle position of the new stop, carefully retract the head until the cutter motor support plate and the head tilt cylinder has a clearance of 1". Use caution, do not damage cylinder when retracting the head. Place the new stop plate in the head tilt link weldment and lay it flat on the dipper arm. Mark this position, and weld the stop in place as shown in Figure 1. It is important that the stop is installed so that it flatly contacts the dipper when retracted in order to avoid point loading on the boom. Extend and retract the cylinder to ensure proper installation.



Note: Replaces / Same as Bulletin No. 060197A

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# TECHNICAL INFORMATION BULLETIN No. 061897

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Seguin, Texas 78155  
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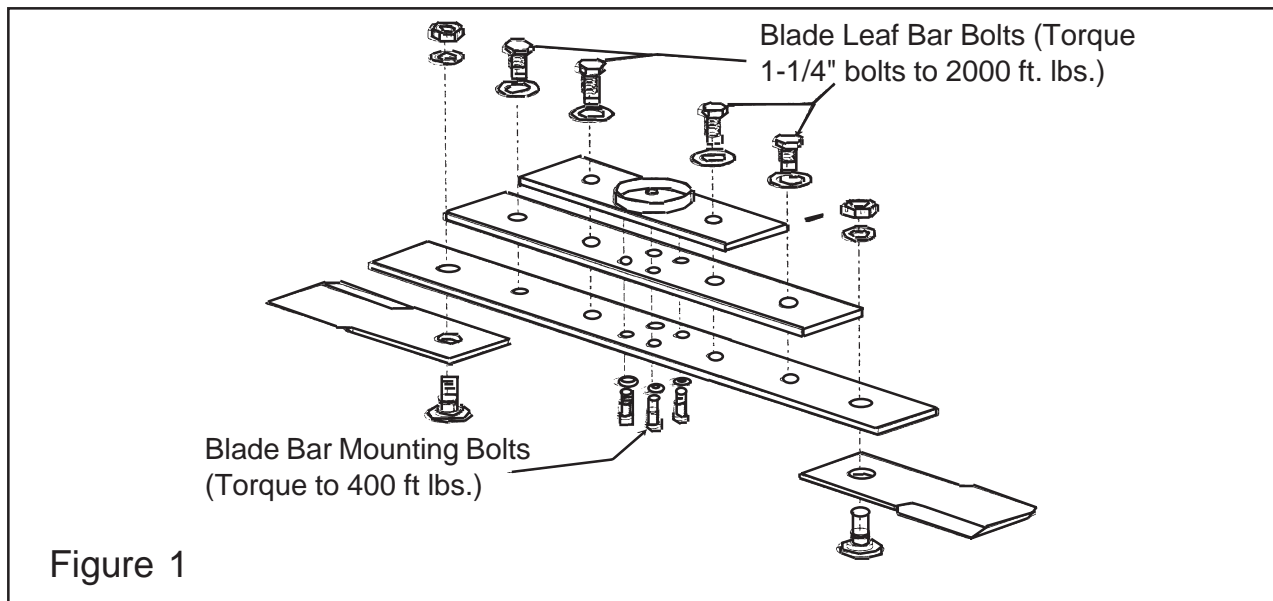
|  |                                   |                                   |
|--|-----------------------------------|-----------------------------------|
| <b>Models:</b> Machete, MB21 S/N 01001 - 01071, 03507 & 02684 & MB24 S/N 01001 - 01040 & 03459 | <b>Bulletin No:</b><br><br>061897 | <b>Date:</b><br><br>Jun. 18, 1997 |
|--|-----------------------------------|-----------------------------------|

## New Thick Blade Bar & Larger Bolts:

Early October 1996, in order to ensure an extended service life, a new blade bar was introduced which featured larger blade bar leaf bolts (from 7/8" to 1-1/4") and a thicker bottom leaf. As a result, longer mounting bolts (from 3-1/2" to 4") are required to ensure adequate thread engagement into the spindle shaft.

When ordering a replacement blade bar using the original number, the new blade bar design will automatically be sent. However, the 4 longer mounting bolts may not be included.

Therefore, when ordering a replacement blade bar, ensure that the proper length mounting bolts (P/N 02964861 which is a 4" Bolt) are also replaced. DO NOT attempt to mount the new style blade bar using the old shorter bolts. The best way is to always check the replacement bottom leaf thickness as compared to the bottom leaf that was removed. If the replacement is thicker then the new longer bolts will be needed. Another way to determine which one you have check the Leaf retaining bolt size.



Note: Replaces / Same as Bulletin No. 061897A

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# ALAMO INDUSTRIAL™

## TECHNICAL INFORMATION BULLETIN No. 071797

Alamo Industrial™ Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |                               |                               |
|--|-------------------------------|-------------------------------|
| <b>Models:</b> Machete, MB21 S/N 01001 - 01108<br>& MB24 S/N 01001 - 01045 | <b>Bulletin No:</b><br>071797 | <b>Date:</b><br>Jul. 17, 1997 |
|--|-------------------------------|-------------------------------|

### Joystick Power Cut Off Switch:

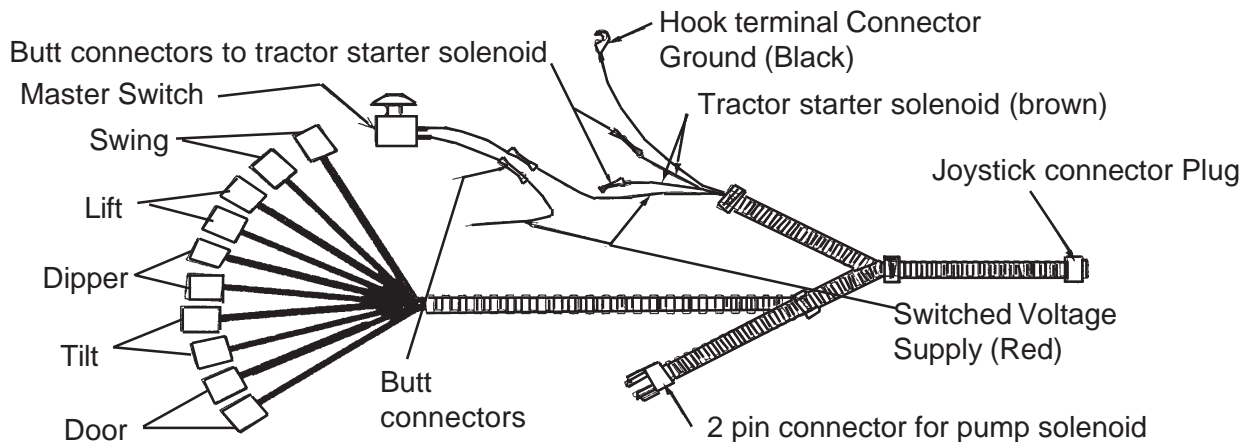
A Joystick Supply Cut Off Switch (Master Switch) can be added to the Machete in order to eliminate the possibility of damage caused by the joystick moving while roading the machine over rough terrain. Inadvertent movement of the controller can result in uncontrolled movement of the boom which may result in damage to the boom rest, the tractor or other areas.

#### Parts needed:

| Part No. | Qty | Description   |
|----------|-----|---|
| 02964028 | 1   | Push Pull Switch, (or a locally purchased switch)                         |
| -----    | 2   | 12 or 14 gauge wire butt connectors (furnished by installer)              |
| -----    | a/r | 14 gauge wire cut to length, preferably red wire (furnished by installer) |

#### Procedure:

1. Turn off the tractor ignition and remove the key (disable tractor to where it can only be started when you want it started). Set parking Brake.
2. Find the RED Voltage supply wire which supplies electrical power to the Joystick.
3. Locate a suitable mounting position within easy reach of the operator, and run the two wires from the new switch to the red power supply wire. Cutting the existing power supply wire connect the two butt connector from the switch to the cut power supply, see drawing.
4. Operate the machine to ensure that the joystick functions will not work when switch is "OFF" and will when switch is "ON"



Note: Replaces / Same as Bulletin No. 071797A

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**TECHNICAL INFORMATION BULLETIN No. 100397**

Alamo Industrial™ Technical Services Department  
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 Seguin, Texas 78155  
 830-372-2708

|  |                                   |                                  |
|--|-----------------------------------|----------------------------------|
| <b>Models:</b> Machete, MB21 S/N 01001 - 01108<br>& MB24 S/N 01001 - 01045 | <b>Bulletin No:</b><br><br>100397 | <b>Date:</b><br><br>Oct. 3, 1997 |
|--|-----------------------------------|----------------------------------|

**Cylinder, Link Arm, Turning Arm & Hitch Post Pin Update Kit:**

Parts Required to update a Machete Boom Mower to the current Pin Design. In an effort to remedy some of the confusion which exists in regards to what is required to update the Machete Boom Mowers, the following list has been prepared. If all the listed parts are installed in accordance with the related Service and Technical Bulletins, along with the instructions provided with each individual kit. The mower will be updated to the way the current models are built.

**Parts Required:**

(Main Pin Replacement Kit, See Service Bulletin No. 970002A)

| Part No. | Qty | Description                      | Part No. | Qty | Description                 |
|----------|-----|----------------------------------|----------|-----|-----------------------------|
| 02967689 | 1   | Pin Kit, Main Pin at Turning Arm | 02967693 | 1   | Pin Kit, Dipper to Lift Arm |
| 02967687 | 1   | Pin Kit, Dipper to Hitch Post    |          |     |                             |

(Cylinder Pin Kits, See Technical Information Bulletin No. 041797-2)

| Part No.  | Qty | Description                                  | Part No.  | Qty | Description                  |
|-----------|-----|--|-----------|-----|------------------------------|
| 02967679  | 1   | Pin Kit, Lift Cyl. Barrel End                | 02967677* | 1   | Pin Kit, Lift Cyl. Rod End   |
| 02967683  | 1   | Pin Kit, Tilt Cyl. Barrel End                | 02967681  | 1   | Pin Kit, Tilt Cyl. Rod End   |
| 02967677* | 1   | Pin Kit, Dipper Cyl. Barrel End              | 02967685  | 1   | Pin Kit, Dipper Cyl. Rod End |
| 02967679  | 1   | Pin Kit, Swing Cyl. Barrel End               | 02967675  | 1   | Pin Kit, Swing Cyl. Rod End  |
| 02967681  | 1   | Pin Kit, Hitch Post Link Arm to Dipper       |           |     |                              |
| 02967694  | 1   | Pin Kit, Hitch Post Link Arm to Linkage Asy. |           |     |                              |
| 02967691  | 1   | Pin Kit, Linkage Asy. to Hitch Post          |           |     |                              |
| 02968803  | 10  | Pin Bushing                                  |           |     |                              |

(Mower Head Hitch Post Replacement Kit, See Technical Information Bulletin No. 041797-1)

| Part No. | Qty | Description                |
|----------|-----|----------------------------|
| 02972231 | 1   | Hitch Post Replacement Kit |

(Turning Arm - King Pin Replacement Kit, See Service Bulletin No. 970008A)

| Part No. | Qty | Description                             |
|----------|-----|---|
| 02972211 | 1   | Turning Arm - King Post Replacement Kit |

(Lift, Dipper and Head Tilt Drop Restrictions See Service Bulletin No. 970004A & 960009)

| Part No. | Qty | Description       | Part No. | Qty | Description          |
|----------|-----|-------------------|----------|-----|----------------------|
| 02972159 | 3   | Straight Adapters | 02969398 | 3   | .055" Orifice Plates |

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## TECHNICAL INFORMATION BULLETIN No. 112097

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|  |                                   |                                   |
|--|-----------------------------------|-----------------------------------|
| <b>Models:</b> Machete, MB21 S/N 01001 - 01108<br>& MB24 S/N 01001 - 01045 | <b>Bulletin No:</b><br><br>112097 | <b>Date:</b><br><br>Nov. 20, 1997 |
|--|-----------------------------------|-----------------------------------|

### Update Kits Combined (Kit P/N 02973216):

#### Includes - Hitch Post Kit , Cyl. Pin Kits, Hinge Pin Kit Turning Arm Pin Kit and Lift & Dipper Drop Restrictors

Confusion regarding parts to necessitate the update of the MB21 & MB24 foot Machete mowers has required that all of the parts required for the update be located under one single Kit number in order to ensure that all of the new designed parts are installed. The parts delivered under this new Kit number will include all of the parts necessary to fulfill the requirements of the following Service and Technical information Bulletins:

|                                |          |               |                                    |
|--------------------------------|----------|---------------|------------------------------------|
| Technical Information Bulletin | 041797-1 | Apr. 17, 1997 | Hitch Post Replacement             |
| Technical Information Bulletin | 041797-2 | Apr. 17, 1997 | Cyl. Mount Pin Replacement         |
| Service Bulletin               | 970001A  | Mar. 19, 1997 | Turning Arm - King Pin Replacement |
| Service Bulletin               | 970002A  | Mar. 21, 1997 | Hinge Pin Replacement              |
| Service Bulletin               | 970004A  | Apr. 14, 1997 | Lift & Dipper drop Restrictors.    |

Therefore, if a Machete mower manufactured with in a serial number within the above listed range still requires the above listed updates, all the necessary parts can be obtained by ordering the above listed single kit number 02973216. Complete instructions will be sent along with the parts in addition to the instructions in the individual Bulletins. Likewise, If individual kits are necessary they can be ordered using the individual kit numbers as listed in the above bulletins.

DO NOT order the above listed Kit (P/N 02973216) if some updates have been done and some haven't because you will end up with more parts than needed. Do not make any repairs or order any parts until you have reviewed all the above listed Bulletins concerning these updates.

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MACHETE

# NOTES



## TECHNICAL INFORMATION BULLETIN No. 120697

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |                               |                              |
|--|-------------------------------|------------------------------|
| <b>Models:</b> MacheteBoom MB21 & MB24 | <b>Bulletin No:</b><br>120697 | <b>Date:</b><br>Dec. 6, 1997 |
|--|-------------------------------|------------------------------|

### Lock Valve Installation Instructions:

Instructions for installing a lock valve on the tilt function of an Alamo Industrial Model Machete Boom product manufactured before May 1, 1997.

The nominal leak down rate for the cutter head tilt section of the electrically controlled positioning valve is one inch of rod travel in four minutes. If your machine exhibits a leak down rate substantially greater than this, it typically indicates excessive valve component wear due to contaminated oil in the tractor. Refer to the Tractor's Operator / Maintenance guide concerning Oil & Filter change intervals to eliminate contamination possibilities.

If the cutter head tilt cylinder leak down is greater than one inch of rod travel in four minutes and this is considered excessive, a lock valve may be added to the tilt function of the boom machine. Alamo Industrial has developed a cure for this and can provide (at a nominal charge) all the parts for a lock out vale for the tilt function. The Lock valve will only work on the tilt function of the Boom Machine due to the design of the hydraulic System. The only parts that must be provided by the installer are two, twelve inch pieces of 18 gauge wire. Each wire needs to have a # 8 ring connector on one end and a wire splice connector on the other end.

The drawings on the next page shows the details of the parts and their assembly. The Lock Valve must be installed in the "C-1" port of the cutter head tilt section

### The following parts are required to make this modification:

| Part No. | Qty | Description  |
|----------|-----|--|
| 02972180 | 1   | Straight Hydraulic Adapter (available from Alamo Industrial)   |
| 001654   | 1   | Hydraulic Fitting, 90° Elbow (available from Alamo Industrial) |
| 02972208 | 1   | Solenoid Valve Assembly (available from Alamo Industrial)      |
| -----    | 2   | 18 gauge wire, 12" long each (furnished by installer)          |
| -----    | 2   | # 8 ring connectors (furnished by installer)                   |
| -----    | 2   | 18 gauge splice connectors (furnished by installer)            |

NOTE; Installation of this Lock valve will not be covered under warranty.

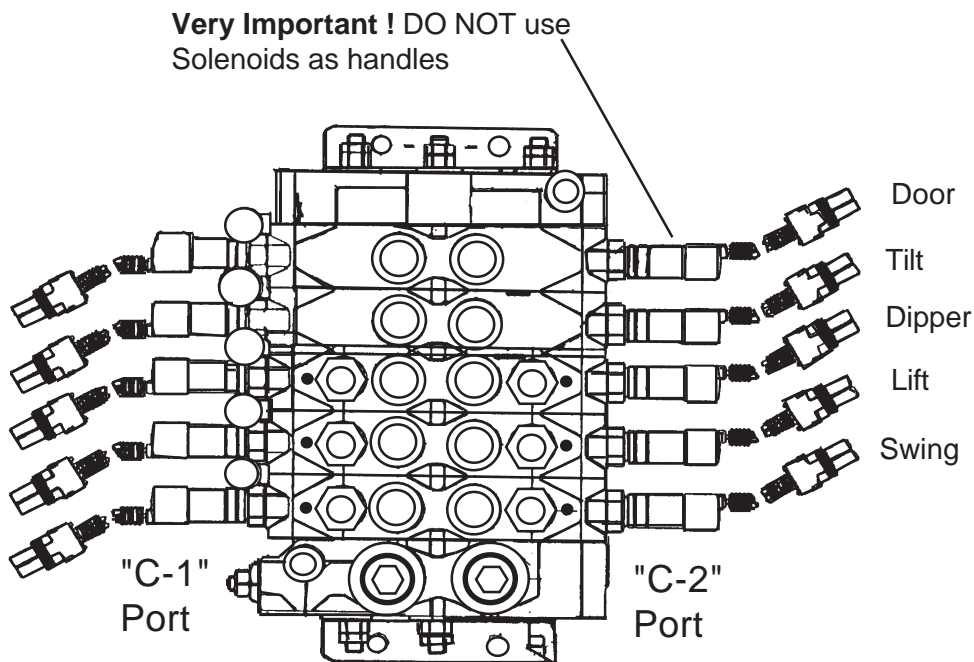
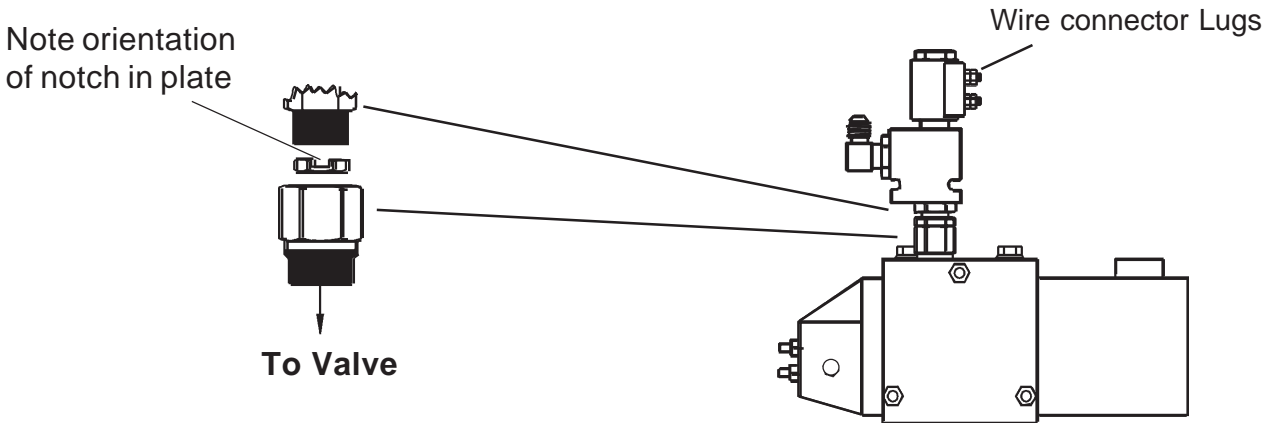
Continued Next Page

MACHETE

## Information Bulletin 120697 Continued from previous Page

### Electrical connection:

Identify the plus (+) lead running to the solenoid for the tilt function. This solenoid is located across the valve from the fitting you installed. Remove approximately 2" of the outer plastic covering from the wires coming from the solenoid. Splice one of the 18 gauge wires you provided into one of the wires. Connect the other end of that wire to a lug on the solenoid. It makes a difference which wire runs to which connector. Insulate any exposed wires with electrical tape.



#### Steps to take to install the tilt cylinder lock valve

##### Hydraulic Connections

1. Remove the tilt section hose from the "C-1" Port
2. Assemble the parts as shown above.
3. Attach the hose to the fitting on Lock valve, Test and run.

## **TECHNICAL INFORMATION BULLETIN**

### **No. 120697**

This document does not authorize the repair or replacement of parts under warranty

MACHETE



## **TECHNICAL INFORMATION BULLETIN No. 041398**

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|   |                                   |                                   |
|---|-----------------------------------|-----------------------------------|
| <b>Models:</b> All Machete Boom , MB21 & MB24<br>All Slope Mowers | <b>Bulletin No:</b><br><br>041398 | <b>Date:</b><br><br>Apr. 13, 1998 |
|---|-----------------------------------|-----------------------------------|

### **Eliminate Erratic Boom movement: (which utilize the joystick operated proportional valve system)**

Procedures to eliminate erratic boom operation caused by microwave interference from customer installed two-way radios.

There have been some scattered reports in regards to erratic or unexpected movement of one or more of the proportionally controlled boom functions of the joystick control system during the operation of the customer installed two-way radios.

Specifically, the Swing , Lift or Dipper functions may operate at a speed of one foot of movement every 10 to 20 seconds, depending on the function and direction, when the radio microphone is keyed.

Research and experiments with machines in the field has revealed that this phenomenon is the reception of the signal transmitted by the radio passing through the variable controls of the boom control system. Specifically, the wire harness of the control system acts much like a receiving antenna and receives the radio signal which sends a false signal through harness.

Elimination of the interference may be obtained with the use of at least of three possible options:

1. Remove the radio from the tractor completely.
2. Install a reflecting plate under the Antenna. A reflecting plate is simply a thin, flat piece of metal which provides the proper amount of impedance to essentially reflect the signal emanating down from the antenna and prevent interference with the valve electronics and tractor functions. Since the installation requires a fairly large (at least 36" square) area, the specially designed reflecting or "ground plane tape" can be used in place of the metal sheet for easier installation. this tape is available at most electronics or radio equipment sources.
3. Utilize a ground plane antenna. These specially designed antenna utilize the standard central radial element and at least two other radials set at 45° angles to the central one. These radials must be cut to specific lengths depending on the frequency of the system. Only a professional radio installer or retailer should be consulted in regard to the availability and proper installation of these antenna.

The installation, operation, and resulting effects to the tractor or any attachment due to the addition of a radio system to any machine is the responsibility of the machine owner and the radio installer. Only trained, profesional radio installers should be utilized.

**This document does not authorize the repair or replacement of parts under warranty**

MACHETE



## TECHNICAL INFORMATION BULLETIN No. 020199

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|  |                                   |                                  |
|--|-----------------------------------|----------------------------------|
| <b>Models:</b> All Machete Boom , MB21 & MB24<br>All A-Boom Mowers utilizing the New Holland<br>TS Series Tractors | <b>Bulletin No:</b><br><br>020199 | <b>Date:</b><br><br>Feb. 1, 1999 |
|--|-----------------------------------|----------------------------------|

### Hood to Frame Interference on TS Series Tractors:

On some occasions, it has been reported that the initial mount kit designs involving the installation of the current A-Boom or Machete Boom mowers to New Holland TS90, 100 or 110 tractors allowed the main frame cross over / cooling tube to interfere with the movement of the hood. This interference would not allow the hood to open to provide access to the required maintenance points of the tractor engine.

To compensate, the hood was required to be completely removed to perform the required maintenance procedures.

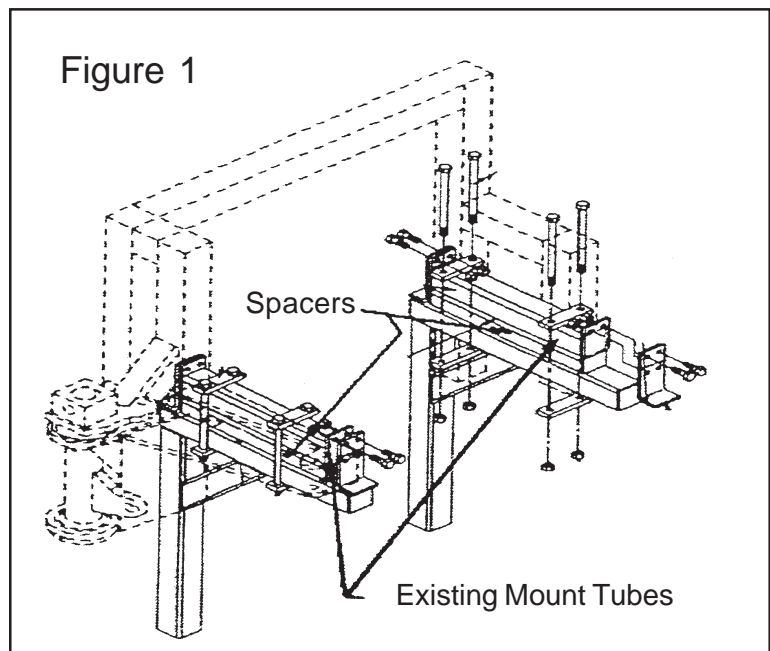
A spacer kit which lifts the frame to provide clearance between the hood and the cross / cooling tube enough to allow the hood to open to the first position is now available for all of the affected tractors.

The kit components should be installed per the instructions provided in the kit. likewise, all required hood components such as hinges, shocks & etc. should also be installed

#### Part Numbers required:

A-Boom: 2 WD kit No. 02974715  
4 WD kit No. 02974739  
Machete: 2 WD kit No. 02974351  
4 WD Kit No. 02974741

NOTE: Claims for compensation for warrantable repairs should be filed in accordance with the Alamo Industrial warranty Guide procedures. This Bulletin does not authorized warranty repairs for this procedure.



**This document does not authorize the repair or replacement of parts under warranty**

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## **TECHNICAL INFORMATION BULLETIN No. 031000**

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|   |                               |                               |
|---|-------------------------------|-------------------------------|
| <b>Models:</b> Models mounted on New Holland TS Series Tractors | <b>Bulletin No:</b><br>031000 | <b>Date:</b><br>Mar. 10, 2000 |
|---|-------------------------------|-------------------------------|

### **New Holland TS Series Fuel Filter:**

New Holland ships TS100 Tractors to Alamo Industrial with a # 87801634 fuel filter installed.

New Holland has circulated a service bulletin stating that a longer or taller filter is the replacement part for the fuel filter and the filter should be changed at the recommended time.

Alamo Industrial TS Series mount kit components will interfere with the longer / taller filters.

Please continue using the # 87801634 filter when replacing the fuel filter on the TS Series tractors equipped with the Alamo Industrial products. Alamo Industrial attachments do not stress or "Work" the tractor engines in a manner that would be considered extreme service. The part # 87801434 fuel filter will provide adequate protection when the engine of a TS Series New Holland tractor is powering Alamo Industrial Side or Boom Mounted products.

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1-34





## TECHNICAL INFORMATION BULLETIN No. 032200-1

Alamo Industrial™ Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |                                     |                                   |
|---|-------------------------------------|-----------------------------------|
| <b>Models:</b> All Machete Boom , MB21 & MB24 | <b>Bulletin No:</b><br><br>032200-1 | <b>Date:</b><br><br>Mar. 22, 2000 |
|---|-------------------------------------|-----------------------------------|

### New Oil Filter Kit P/N 02976069:

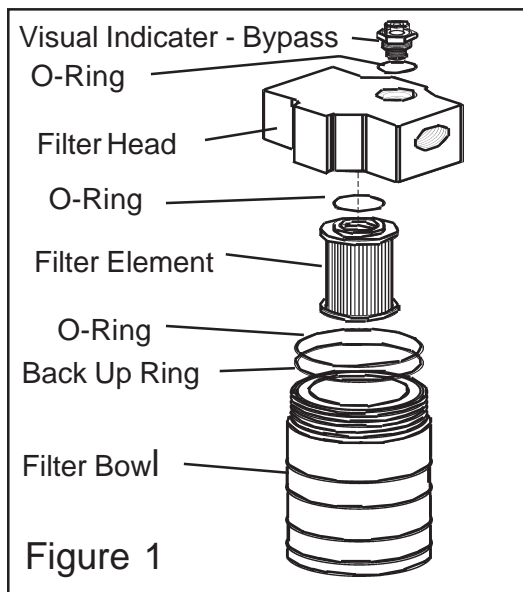
Detailed investigation of recent valve failures revealed that in the vast majority of the incidences, the failures are attributable to contamination within the tractor hydraulic systems which supply pressure to the control valve. Failure normally take the form of one or more inoperative or poorly operating functions. Repair may involve the replacement of the electronic controller for the section or, in severe cases, the replacement of the entire valve. Particulate contamination in the form of small gear metal or brass particles created during break-in and operation and are not removed during required maintenance of the tractor can enter the valve, this creates leakage due to wear or clogging of passageways.

In response, an in-line pressure filter and fitting kit (Kit P/N 02976069) has been developed for installation in the pressure line which delivers oil to the valve. The kit provides all the necessary fittings, hardware and instructions to facilitate the correct installation.

Installation of the Filter Kit will greatly reduce the possibility of the occurrence of failures within the Machete control valve due to particulate contamination. This contamination may result from poor maintenance of the tractor hydraulic system or other hydraulic system performance characteristics or problems.

An indicator located on the top of the filter housing will indicate when the filter is bypassing thus requiring the replacement of the filter element. The element is a canister insert which is easily replaced by unscrewing the cannister.

In accordance with the published Warranty Policy, failures proven to be the result of contamination of the system oil due to poor maintenance, performance or repair of the supply (Tractor) system will not be compensated under Alamo Industrial Warranty.



**This document does not authorize the repair or replacement of parts under warranty**



# TECHNICAL INFORMATION BULLETIN No. 080300

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|  |                                   |                                  |
|--|-----------------------------------|----------------------------------|
| <b>Models:</b> All Machete, A-Boom, Versa, Rear Mount, Slopemower, Brahma, EKII, Hydro 60, Hydro 72 & Hydro 15<br>All Hydraulic powered Rotary Mower heads that utilize the # 02960553B, 02960553C and 02968859A Spindle Assemblies. | <b>Bulletin No:</b><br><br>080300 | <b>Date:</b><br><br>Aug. 3, 2000 |
|--|-----------------------------------|----------------------------------|

## Spindle Oil Filler Kit P/N 02976501:

A Spindle oil filler kit has been developed to provide accurate an easy fill of oil into the spindles used on all hydraulic powered mowers. The Oil filler Kit P/N 02976501 is available through Alamo Industrial Parts dept.

Installation requires the replacement of the fill plug with the female quick connect fitting. To fill the spindle. attach the hose and oil bottle to the spindle by utilizing the quick connect fittings. remove the vent plug and pump in the oil untill oil is seen at the vent plug opening. reinstall the vent plug and remove the bottle at the quick connect fitting. The female quick disconnect is designed to be left on the spindle in place of the fill plug.

Utilization of this spindle fill kit should decrease maintance time and failures by providing accurate oil fill of the spindle assembly.

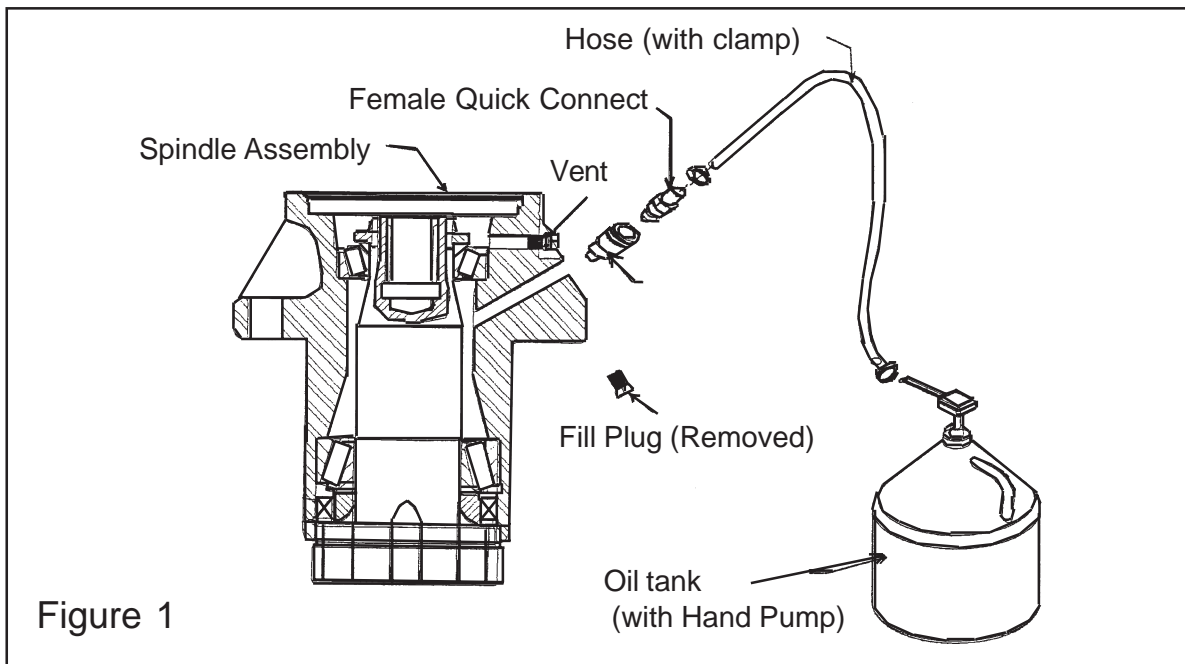


Figure 1

**This document does not authorize the repair or replacement of parts under warranty**



## TECHNICAL INFORMATION BULLETIN No. 080400

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|   |                                      |                              |
|---|--------------------------------------|------------------------------|
| <b>Models:</b> All Machete, A-boom, Versa Boom, Slopemower. Boom Mowers which utilize the Joystick operated control valve with the 02976069 oil Filter Kit installed. | <b>Bulletin No:</b><br><b>080400</b> | <b>Date:</b><br>Aug. 4, 2000 |
|---|--------------------------------------|------------------------------|

### Filter Maintenance Procedure:

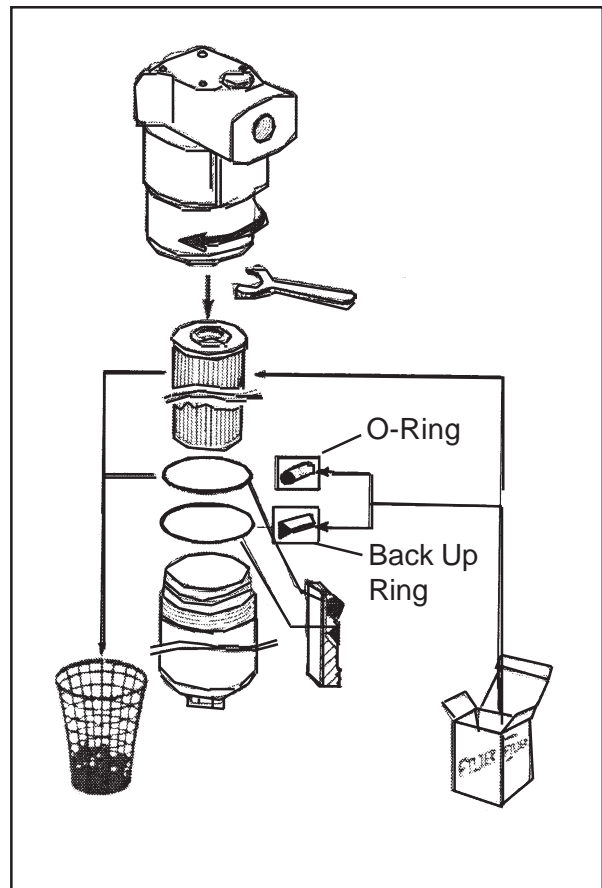
The following Procedure should be followed to provide the correct maintenance of the 02976066 Filter assembly use as standard on the machete model boom and any mower using Joystick controlled hydraulic system, and filter as optional equipment.

#### When to Change Filter:

Inspect the visual indicator when the system is operating at normal operating temperature and under normal flow conditions. When red starts to enter the indicator window, change the element. This will occur prior to bypass by the filter.

#### Element Service Procedure:

1. Shut System down a disable tractor so it cannot be started. Let Oil cool to a safe temperature.
2. Place a suitable container under the filter to catch any spillage.
3. Unscrew the filter bowl using the wrench flats at the bottom of bowl. Remove the bowl and drain the oil into the container.
4. Pull the element (P/N 02976067) off the adapter and discard it.
5. Remove the head to bowl seal and discard. Clean the seal area with a lint free cloth. Install the new seals as shown taking care not to cut the new seals.
6. Install the new element onto the element adapter boss.
7. Thoroughly clean the filter bowl and fill approximately one half full with clean oil.
8. Screw the Bowl onto the head. Torque the bowl to 30 ft. lbs.
9. Operate the system to expel any trapped air and check for leaks.
10. Check and fill the tractor oil level as required.



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# TECHNICAL INFORMATION BULLETIN No. 012501

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|   |                               |                              |
|---|-------------------------------|------------------------------|
| <b>Models:</b> Machete Boom Mowers<br>S/N MB21- 01572 & Up<br>S/N MB21-01245 & Up | <b>Bulletin No:</b><br>012501 | <b>Date:</b><br>Jan 25, 2001 |
|---|-------------------------------|------------------------------|

## Control Valve Relocation:

The 2001 Machete will reflect a change in the way some of the components are mounted to the tractor. New Machete units received from the factory, or assembled by dealer after S/N MB21-01572 & UP or MB24-01245 & Up will have the control valve in a new location. It will no longer be mounted on the frame. The Control Valve will be located under the front pump cover in the front of the tractor. This change was made to better protect the Valve and its components from debris and other possible damage.

As you can see in figure 1, the valve is fastened to a plate that is mounted to the units hydraulic tank. The Pressure Filter was relocated to a bracket on top of the tank. Both the Pressure Filter and the Pump Filter are accessible and can be changed with minimal effort. Separate hose extension were used to extend the hose reach to the front of the tractor. If a hose connection is not easily accessible, then the valve and mounting plate can be unfastened an arranged to allow for romm when servicing.

These Changes were made to better protect the valve and its components. These changes will only be seen on the new units after Jan. 2001 and is not intended for units already in use.

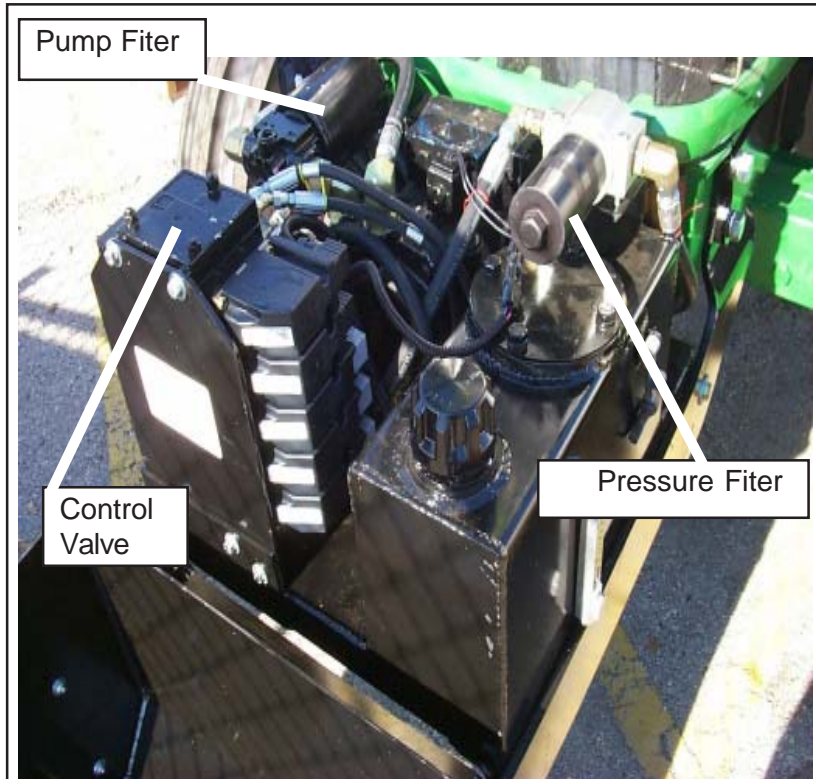


Figure 1

**This document does not authorize the repair or replacement of parts under warranty**

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## **TECHNICAL INFORMATION BULLETIN No. 040901**

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|  |                                   |                                  |
|--|-----------------------------------|----------------------------------|
| <b>Models:</b> All Alamo Industrial Products are affected. | <b>Bulletin No:</b><br><br>040901 | <b>Date:</b><br><br>Apr. 9, 2001 |
|--|-----------------------------------|----------------------------------|

### **Change in the availability of rebuilt components:**

This bulletin has been published to inform you of a change in the availability of rebuilt parts. In the past, rebuilt components such as pumps and motors were available for use as spare parts. That will no longer be the case. The major factor in this decision was the lack of cores that are returned from the customer.

Since Alamo Industrial will no longer offer rebuilt parts an effort will be made to offer customers a complete parts listing of all components that are needed as service repairs. The most common service parts are pumps and motors will now be available for order through Alamo Industrial Customer Service Department. Likewise, a parts breakdown with Alamo Industrial part numbers will be provided. The Eaton Pumps and Motors, Danfoss Control Valves will be the first components available with such a parts breakdown.

It is Our intention to provide a better and more reliable service parts system. This transition will better suit customer, and provide more timely and efficient parts delivery.

**This document does not authorize the repair or replacement of parts under warranty**

MACHETE



## **TECHNICAL INFORMATION BULLETIN No. 041001-1**

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|   |                                     |                                   |
|---|-------------------------------------|-----------------------------------|
| <b>Models:</b> Machete Boom, MB21-01109 & Down<br>MB24-01046 & Down | <b>Bulletin No:</b><br><br>041001-2 | <b>Date:</b><br><br>Apr. 10, 2001 |
|---|-------------------------------------|-----------------------------------|

### **Filter Kit to Update Control Valve System (Kit P/N 02977366):**

There is now available for purchase, a filter kit for Machete units that utilize the Apitech valve. The Apitech valve was the control valve used before the now current Danfoss valve. You can differentiate the type valve in two ways. The first is by serial number. The Machete units PRE-Date the following serial numbers, utilize the Apitech Valve: MB21-01109 & Down, MB24-01046 & Down. The second way is by visually inspecting the unit. The Apitech valve will have electronic Solenoids on both the pressure and return sides of the valve, as well as electronic connections on each solenoid. The Danfoss Control Valve only has electronic connectors on one side. Install the Filter as described by the Assembly Drawing ( Drawing P/N 02977367) that you will receive when you order the Filter Kit (Kit P/N 02977366) for the Machete Unit

#### **When to Change Filter:**

Inspect the visual indicator when the system is operating at normal operating temperature and under normal flow conditions. When red starts to enter the indicator window, change the element. This will occur prior to bypass by the filter.

#### **Element Service Procedure:**

1. Shut System down a disable tractor so it cannot be started. Let Oil cool to a safe temperature.
2. Place a suitable container under the filter to catch any spillage.
3. Unscrew the filter bowl using the wrench flats at the bottom of bowl. Remove the bowl and drain the oil into the container.
4. Pull the element (P/N 02976067) off the adapter and discard it.
5. Remove the head to bowl seal and discard. Clean the seal area with a lint free cloth. Install the new seals as shown taking care not to cut the new seals.
6. Install the new element onto the element adapter boss.
7. Thoroughly clean the filter bowl and fill approximately one half full with clean oil.
8. Screw the Bowl onto the head. Torque the bowl to 30 ft. lbs.
9. Operate the system to expel any trapped air and check for leaks.
10. Check and fill the tractor oil level as required.

**This document does not authorize the repair or replacement of parts under warranty**



## TECHNICAL INFORMATION BULLETIN No. 041001-2

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|   |                                 |                               |
|---|---------------------------------|-------------------------------|
| <b>Models:</b> Machete Boom, MB21-01109 & Down<br>MB24-01046 & Down | <b>Bulletin No:</b><br>041001-1 | <b>Date:</b><br>Apr. 10, 2001 |
|---|---------------------------------|-------------------------------|

### Filter Maintenance Procedure:

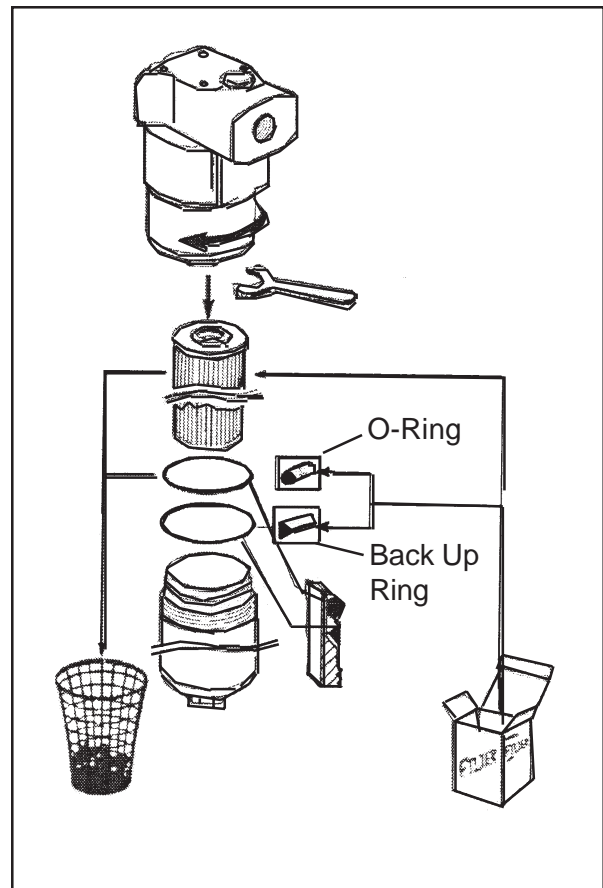
The following Procedure should be followed to provide the correct maintenance of the 02976066 Filter assembly use as standard on the machete model boom and any mower using Joystick controlled hydraulic system, and filter as optional equipment.

#### When to Change Filter:

Inspect the visual indicator when the system is operating at normal operating temperature and under normal flow conditions. When red starts to enter the indicator window, change the element. This will occur prior to bypass by the filter.

#### Element Service Procedure:

1. Shut System down a disable tractor so it cannot be started. Let Oil cool to a safe temperature.
2. Place a suitable container under the filter to catch any spillage.
3. Unscrew the filter bowl using the wrench flats at the bottom of bowl. Remove the bowl and drain the oil into the container.
4. Pull the element (P/N 02976067) off the adapter and discard it.
5. Remove the head to bowl seal and discard. Clean the seal area with a lint free cloth. Install the new seals as shown taking care not to cut the new seals.
6. Install the new element onto the element adapter boss.
7. Thoroughly clean the filter bowl and fill approximately one half full with clean oil.
8. Screw the Bowl onto the head. Torque the bowl to 30 ft. lbs.
9. Operate the system to expel any trapped air and check for leaks.
10. Check and fill the tractor oil level as required.



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MACHETE



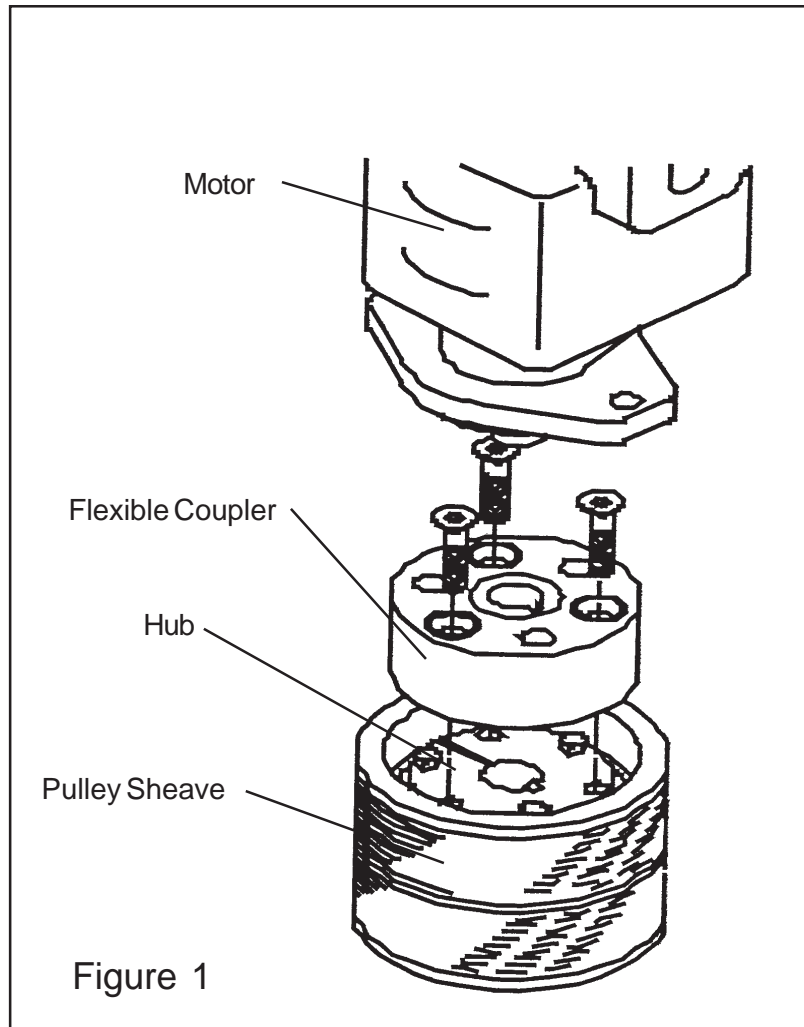
## TECHNICAL INFORMATION BULLETIN No. 041101

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|  |                                   |                                   |
|--|-----------------------------------|-----------------------------------|
| <b>Models:</b> All Alamo Industrial Products using the Buzz Bar Head are affected. | <b>Bulletin No:</b><br><br>041101 | <b>Date:</b><br><br>Apr. 11, 2001 |
|--|-----------------------------------|-----------------------------------|

### Buzz Bar Drive Coupling Design change:

There has been a design change to the drive coupler assembly for the Buzz bar Cutting Head. If a flexible coupler, Alamo Industrial P/N 02974245 (for Machete) or P/N 02974246 (for A-Boom & Slopemower), are ordered they will be a different design. The new flexible coupler design will be molded rubber with metal inserts. The new molded rubber version will directly replace the machined design using the same part number. An installation drawing, that describes the assembly in detail, will be shipped if a new coupler is ordered. This bulletin is to inform you of the design change (see Figure 1) If there are further questions please contact Alamo Industrial's Technical Service Department. Also See Manual Insert Sheet P/N 02978337.



**This document does not authorize the repair or replacement of parts under warranty**





## TECHNICAL INFORMATION BULLETIN No. 101802

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|  |                                   |                                   |
|--|-----------------------------------|-----------------------------------|
| <b>Models:</b> All Machete, A-Boom, Versa, Rear Mount, Slopemower, Brahma, EKII, Hydro 60, Hydro 72 & Hydro 15<br>All Hydraulic powered Rotary Mower heads that utilize the # 02960553B, 02960553C and 02968859A Spindle Assemblies. | <b>Bulletin No:</b><br><br>101802 | <b>Date:</b><br><br>Oct. 18, 2002 |
|--|-----------------------------------|-----------------------------------|

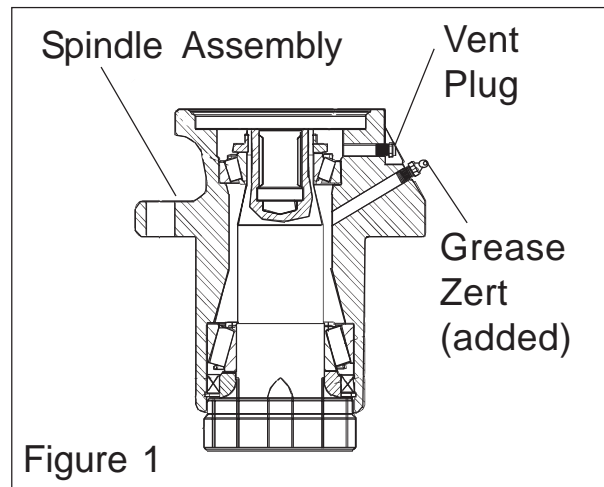
### Spindle Bearing Lubrication Update:

Normal maintenance of the # 02960553B, 02960553C and 02968859A Spindle assemblies has included the addition of NLGI 000 grease to provide proper lubrication of the bearing assemblies. Due to repeated customer requests, this lubrication requirement has been changed to NLGI EP, # 2 Lithium Wheel Bearing Grease.

Implementation of this grease will allow improved lubrication especially to the top bearing as well as substantial improvement of the daily maintenance requirements.

### Conversion:

1. Remove the existing fill plug from the spindle housing and discard it. (this is the lower plug in figure 1)
2. Install a standard 1/4" fine thread grease zert into the fill plug port as shown in figure 1.
3. Remove the Vent plug (Top plug in figure 1)
4. Fill the housing with NLGI EP, # 2 Lithium Grease or equivalent from a standard grease gun until the new grease is seen in the vent plug hole. (Approximately 2 standard grease tubes will be required when Spindle Assembly is empty).
5. Clean off any excess or over flow grease and reinstall vent plug.
6. Maintain proper lubrication with 5 pumps of grease into the spindle every 8 hours of use. This will keep the Spindle bearings lubricated.
7. Always clean excess Grease away from Spindle after greasing Spindle.



**This document does not authorize the repair or replacement of parts under warranty**



## TECHNICAL INFORMATION BULLETIN No. 121802

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|  |                               |                               |
|--|-------------------------------|-------------------------------|
| <b>Models:</b> Machete Boom Mowers - All<br>Brahma Side Mnt Mowers - All | <b>Bulletin No:</b><br>121802 | <b>Date:</b><br>Dec. 18, 2002 |
|--|-------------------------------|-------------------------------|

### Recommended Brands of Hydraulic Oil:



As of November 10 of 2002, Alamo Industrial™ changed the specification in regard to the recommended hydraulic oil for use in the current Machete Boom and Brahma mounted mowing system. This Oil change effects the front mounted 18-gallon oil tank, front mounted pump and motor circuit of the Machete Boom.

This update to the specifications will better protect against the possibility of internal motor wear and loss of power.

To comply with the new specifications, the front tank hydraulic oil should be changed to the recommended ISO rated AW 100 hydraulic Oil (Alamo Industrial Part No. 00751758)

One of the following equivalents can be used as they are equal to the Alamo Industrial™ recommended hydraulic Oil.

TEXACO: Texaco Rando® HDZ ISO 100  
CHEVRON: Chevron Machine Oil AW ISO 100  
SHELL: Shell TELLUS® Plus Oil ISO 100  
PENNZ: PENNZBELL® AW Hydraulic Oil ISO 100  
MOBIL: Mobil Hydraulic Oil AW 100 Code 58304-7  
EXXON: Exxon NUTO® H ISO 100  
CASTROL: HD PARADENE 100 AW

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## TECHNICAL INFORMATION BULLETIN No. 021802

Alamo Industrial™ Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
830-372-2708

|  |                               |                               |
|--|-------------------------------|-------------------------------|
| <b>Models:</b><br>All Machete™ Boom Mower and<br>All Brahma™ Side Mnt Mowers | <b>Bulletin No:</b><br>021803 | <b>Date:</b><br>Feb. 18, 2003 |
|--|-------------------------------|-------------------------------|

### WARRANTY REPAIRS:

#### Effective February 18, 2003:

Warranty repairs to the **Machete electric over Hydraulic valves** which require the complete replacement of the valve, will be considered only with utilization of Rebuilt Valves.

To facilitate the Warranty replacement of these valves, the following part numbers should be used.

Part No. **02971378RB** ..... Closed Center Load Sense 5 Spool Valve

Part No. **02971379 RB**..... Open Center Fixed Displacement 5 Spool Valve

Warranty repairs to the **Machete or Brahma Mowers** which require the complete replacement of the Motor or Pump, will be considered only with utilization of Rebuilt Parts.

To facilitate the Warranty replacement of these parts, the following part numbers should be used.

Part No. **02967193RB** ..... Motor, Piston Type (Rebuilt)

Part No. **02969527RB**..... Pump, Piston Type (Rebuilt)

**Warranty Claims submitted for replacement of these parts using numbers other than those listed above are subject to denial**

**This document does not authorize the repair or replacement of parts under warranty**

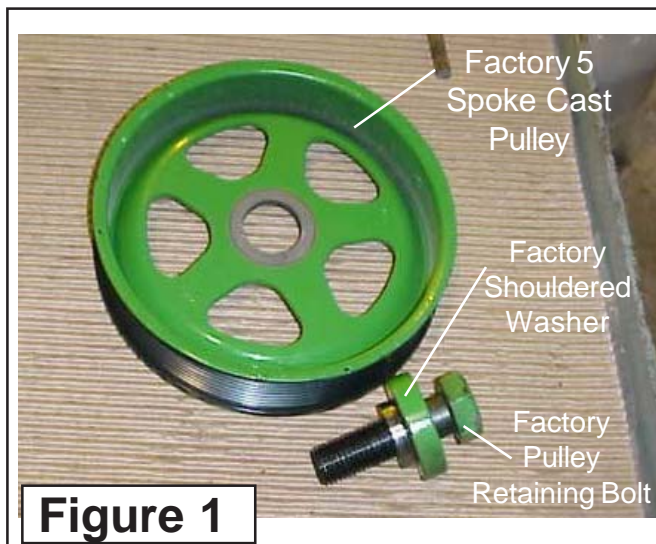
MACHETE



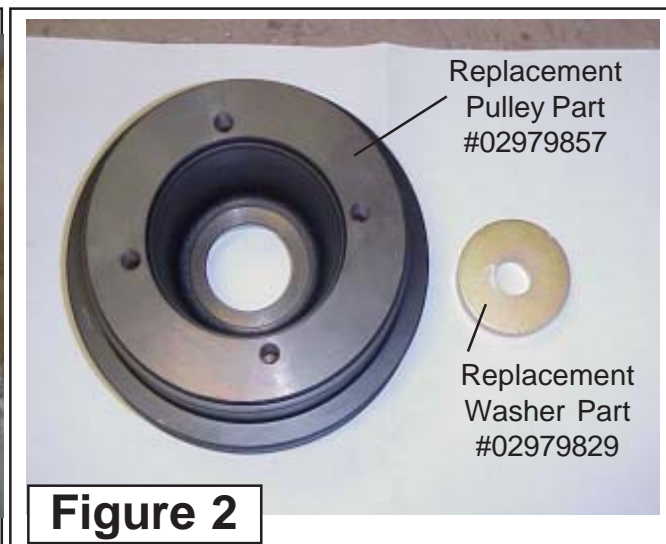
## TECHNICAL INFORMATION BULLETIN No. 041503

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |                               |                                |
|---|-------------------------------|--------------------------------|
| <b>Models:</b><br>All Hydraulic Mowers Mounted on John Deere 6215 (s/n All) , 6415 (s/n 6415M355436), 6320 (s/n 6320H361093), 6420 (s/n 6420H354700) and 6615 (s/n All) Tractors with Tier II emission compliance | <b>Bulletin No:</b><br>041503 | <b>Date:</b><br>April 15, 2003 |
|---|-------------------------------|--------------------------------|



**Figure 1**



**Figure 2**

In an effort to comply with certain requirements in regard to Tier II Emission Standards, Deere and Company initiated a change to the crank shaft pulley on many of the new 6020 series tractors. This was a random change, which did not affect all tractors. In addition, a specific serial number break does not exist to identify the affected units.

The Tier II pulley can be identified as a 5 spoke design as indicated in the figure above (See Figure 1). This pulley must be changed to the tapered lock, solid cast pulley as shown to allow adaptation of the required front pump drive system used to power the Alamo Industrial products. (See Figure 2)

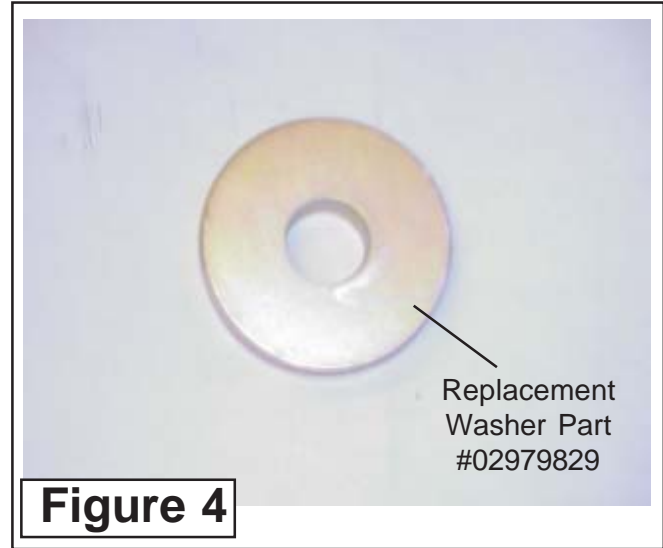
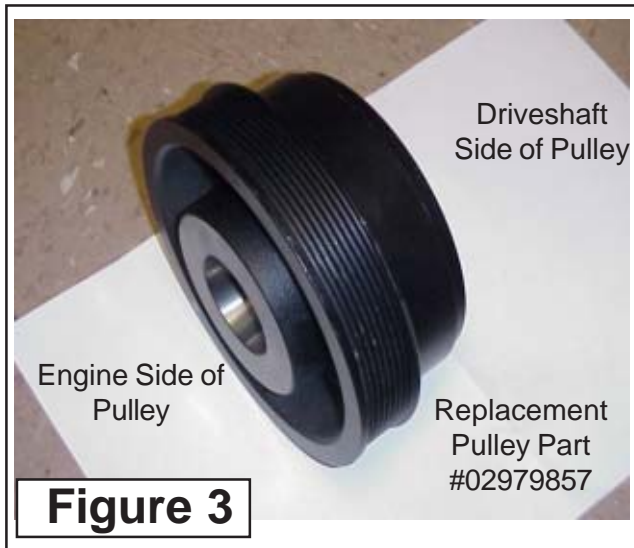
**To change the pulley:**

Remove the original pulley retaining bolt, shouldered washer and pulley. (See Figure 1) Clean nose of Crankshaft using LOCKTITE® number 7649 clean and cure primer. Place a light layer 2 mm to 3 mm (.079 - .118 in.) of LOCKTITE® brand adhesive number 680 (TY15969) to the leading edge of the crankshaft nose.

Install the replacement pulley (P/N 02979857) If any paint inside of pulley it needs to be removed. Make certain to align the pulley with crankshaft, install pulley. (See Pulley Figure 3). Do not hammer on Vibration Damper (Pulley) it must be handled in a way that avoids impact damage. Make certain that you installed the Locktite primer and adhesive as described in previous step before you installed the pulley, this is very important.

## Information Bulletin 041503 Continued from previous Page

Install the new retaining washer (PN 02979829) so that it fits flat against the pulley. The original factory washer will not be used. (See Figure 4) Use the original Factory Pulley retaining Bolt (See Figure 1).



Install the original factory retaining bolt and torque to John Deere Specifications 500 N-m (369 ft. lbs). Check John Deere Service instructions for to assure proper Torque of Crankshaft Pulley Retaining Bolt has not changed. (See Figure 1 for original Bolt) . Pulley retaining bolt must be dipped in clean SAE30 oil before installing bolt.

Install Pulley Adapter. The new Pulley adapter Part # 02979790 to be used with Replacement Pulley Part # 02979857 is a round plate with 4 threaded holes and four non-threaded holes in it. Notice this pulley adapter will not have a center hole in it. The Pulley retaining bolt must be tightened before this adapter is installed because you will not be able to get to the Pulley retaining Bolt after it is installed. The Non-threaded holes are used to mount the Adapter to the Pulley using bolts # 02979791 (10mm 1.5 P X 35mm Gr.10.9) & Lockwasher # 00755954 (10 mm). (LOCKTITE is a registered trademark of Locktite Corp.)

## **TECHNICAL INFORMATION BULLETIN** **No. 041503**

Contact:  
Alamo Industrial  
Technical Services Department  
1502 East Walnut  
Seguin, Texas 78155  
Ph; 830-372-2708 Fax; 830-372-9603

**This document does not authorize the repair or replacement of parts under warranty**

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## TECHNICAL INFORMATION BULLETIN No. 102103

Alamo Industrial™ Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |                     |               |
|--|---------------------|---------------|
| <b>Models:</b> All Non-Cab Models with Expanded Metal Side Screens | <b>Bulletin No:</b> | <b>Date:</b>  |
| Retro Fit Kit P/N 02980005   | 102103              | Oct. 21, 2003 |

### Lexan® (Polycarbonate) Shield Upgrade Kit P/N 02980005: (field Install)

Alamo Industrial has designed a Lexan® (Polycarbonate) Shield that will install on the expanded metal screen currently used on the Non-Cab models. This is a retro fit kit that is designed to be customer installed over the expanded metal screen. The Lexan® Sheets will require trimming and the Holes will have to be drilled in the Lexan® sheets as well as through the existing expanded metal screen frame

#### Recommended Tools:

1. Jig Saw or Circular Saw (hand held or table) equipped with plastic cutting blade.
2. Electric Hand Drill, preferably a variable Speed Drill.
3. 3/8" and 1/4" High Speed Steel Drill Bit. (Drill bit should be sharp and in good condition).
4. Measuring Tape or other measuring device.
5. Hand Wrenches for tightening Bolts, do not use air tools to tighten bolts.
6. Straight edge and marker that will write on Lexan.

#### Lexan Shield Kit Components: (Retro-Fit Kit P/N 02980005 includes:

| Part No. | Qty | Description            | Part No. | Qty | Description           |
|----------|-----|------------------------|----------|-----|-----------------------|
| 02980003 | 1   | Lexan Sheet, Upper     | 02970004 | 1   | Lexan Sheet, Lower    |
| 0461600  | 20  | Bolt, Hex Head 1/4"-20 | 00024100 | 20  | Flatwasher, Std. 1/4" |
| 02980068 | 20  | Fender Washer, 1/4"    | 32901C   | 20  | Locknut, 1/4"-20      |

#### Protection of Lexan Sheets:

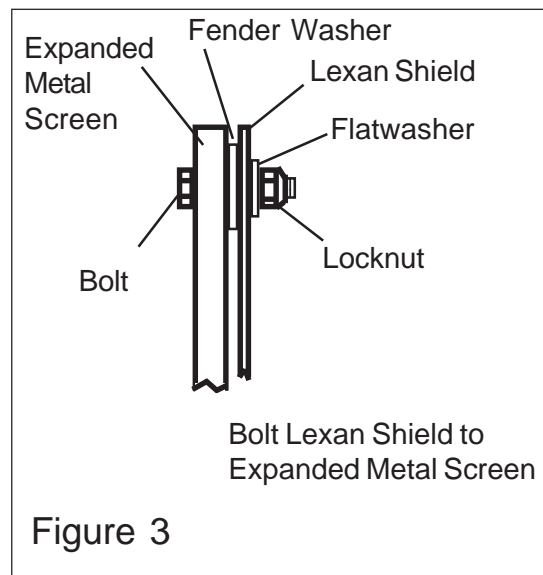
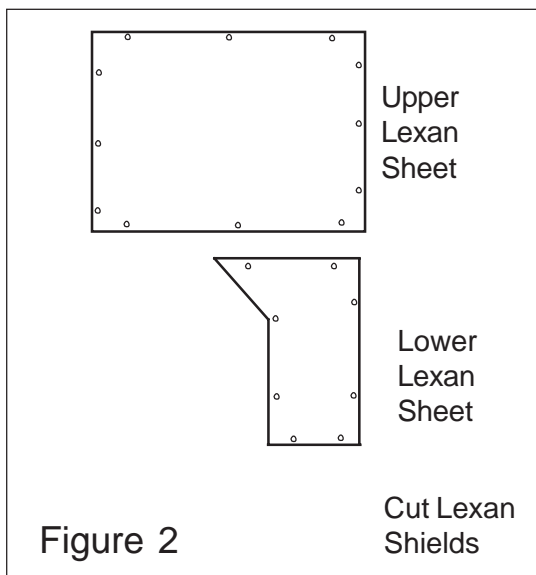
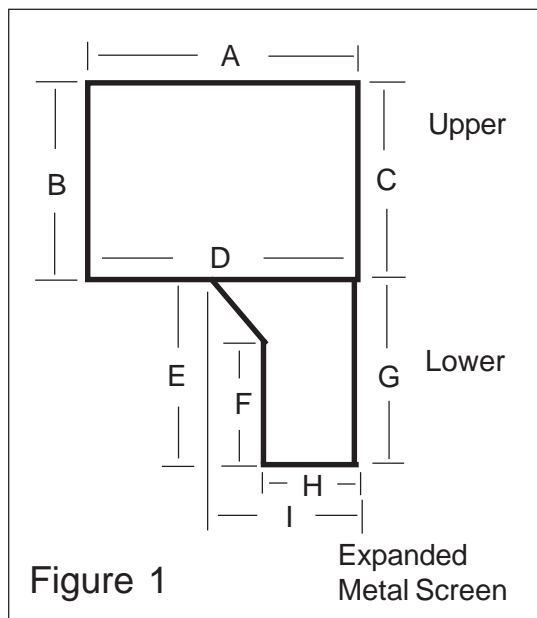
1. Do not remove protective sheet (Paper) from the Lexan® Sheet. This will protect it while you are working with it. You can drill through this protective sheet as well as cut through it.
2. There are two Lexan® Sheets sent, an upper and a lower. Identify these and mark them to designate front to rear, inside to outside because once you cut to size to match the existing Expanded Metal Screen, they cannot be turned around. Cutting these is permanent.

#### Installation Procedure:

3. Use the measuring tape to get the measurements around your existing Expanded Metal Screen and write them down, Note there is an Upper and Lower section (See Figure 1).
4. Place the Lexan® Sheets (Upper and Lower Sheets) on a clean work surface and transfer your measurements from step 1 to the the Lexan® Sheets using a Pen or other marker. RE-CHECK your measurement and when certain they are correct. Cut the sheets out to match your measurements. Lightly sanding the cut edges will smooth them out and round the outer edge slightly helping to protect it. Sheets should look like sheets in Figure 2, note the holes will not be drilled in them yet.

## Information Bulletin 102103 Continued from previous Page

5. Securely clamp the cut Lexan sheets onto the expanded metal screen aligning the outer edges, this can be done upper or lower sheet first. Using a 3/8" drill bit drill the mounting holes through the lexan sheet in a pattern as in Figure 2. When drilling the holes in the Lexan Sheet use the drill to mark the metal frame of the expanded metal screen on all the holes. When all the holes are drilled into the lexan sheet and marked into the metal frame, remove the clamps and the lexan sheet.
6. Using a 1/4" Bit, drill the holes into the frame of the expanded metal screen with the Lexan removed. Note you drilled 3/8" holes in the Lexan and 1/4" holes in the frame work. This is so that the Lexan will not have a binding fit.
7. Install the Bolts as shown in Figure 3. 1 st. bolt through frame, 2 nd. install the fender washer, 3 rd. remove the protective cover sheet from the inner side and install the Lexan sheet, 4 th. install the Flatwasher, 5 th start the Locknuts onto the bolts but do not tighten them.
8. Once all the bolts, washers and nut are installed begin to tighten them. DO NOT over tighten these Locknuts and put the Lexan sheet in a bind which will crack it. Tighten the Nuts evenly and only snug them so the Lexan sheet will not move. Do this with the upper and lower Sheet. Then remove the protective cover from the outside of the sheet.



## **TECHNICAL INFORMATION BULLETIN** **No. 102103**

This document does not authorize the repair or replacement of parts under warranty

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**TECHNICAL INFORMATION BULLETIN No. 011304**

Alamo Industrial™ Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |                                   |                                   |
|---|-----------------------------------|-----------------------------------|
| <b>Models:</b> All Machete Boom, Brahma & A-Boom<br>Mounted on New Holland "TS" Series Tractors | <b>Bulletin No:</b><br><br>011304 | <b>Date:</b><br><br>Jan. 13, 2004 |
|---|-----------------------------------|-----------------------------------|

**Driveline Update Kit:**

Alamo Industrial has designed a new Driveline upgrade kit for units mounted on the New Holland "TS" Series Tractor, This kit will include all component required to install driveline and pump mount weldment. Some models the Hoses will have to be changed as well as the tank rail weldments and some will not have these changed. Always check the Insert Sheet that pertains to the model that the kit is ordered for.

The Machete will need the Cylinder hoses changed, the Brahma will not need any hoses replaced, the A-Boom needs only the Suction Hose replaced.

The Machete and Brahma needs the tank rail weldments replaced and the A-Boom will not, the A-Boom will use the same tank rail weldments. Use the existing hardware to install new Tank Rails.

Kits will include Driveline, Pump Mount, Pump Mount Cover, Required Hardware (nuts Bolts, washers) and Insert Sheet with mounting instructions. Kit may include hoses and tank rail weldments depending on model. Use only the instruction Insert Sheet that is included with kit as all kits do not have the same parts.

**Kits Available:**

| Model             | Kit P/N       | Insert Sheet |
|-------------------|---------------|--------------|
| Machete Boom..... | 02980404..... | 02980638     |
| Brahma.....       | 02980631..... | 02980639     |
| A-Boom.....       | 02980636..... | 02980640     |

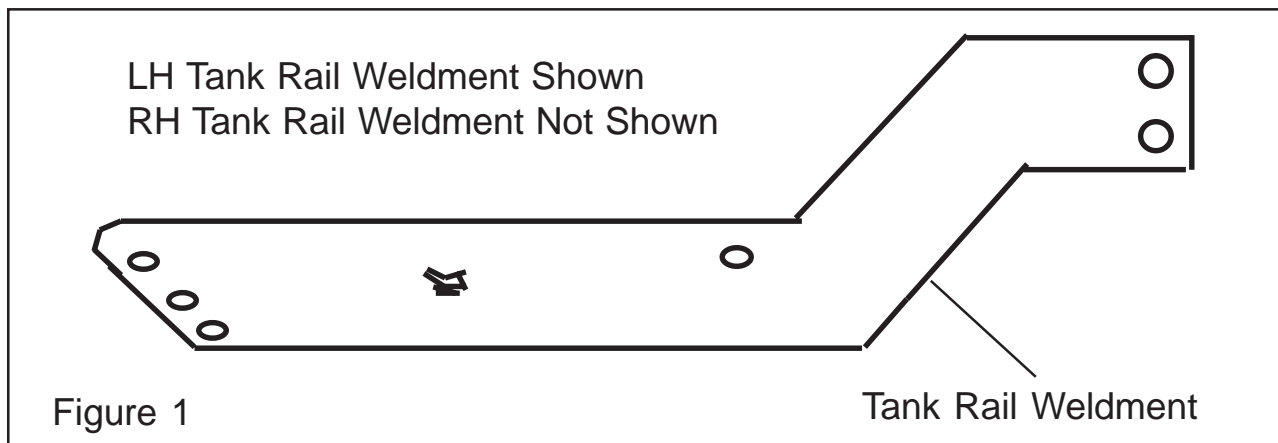
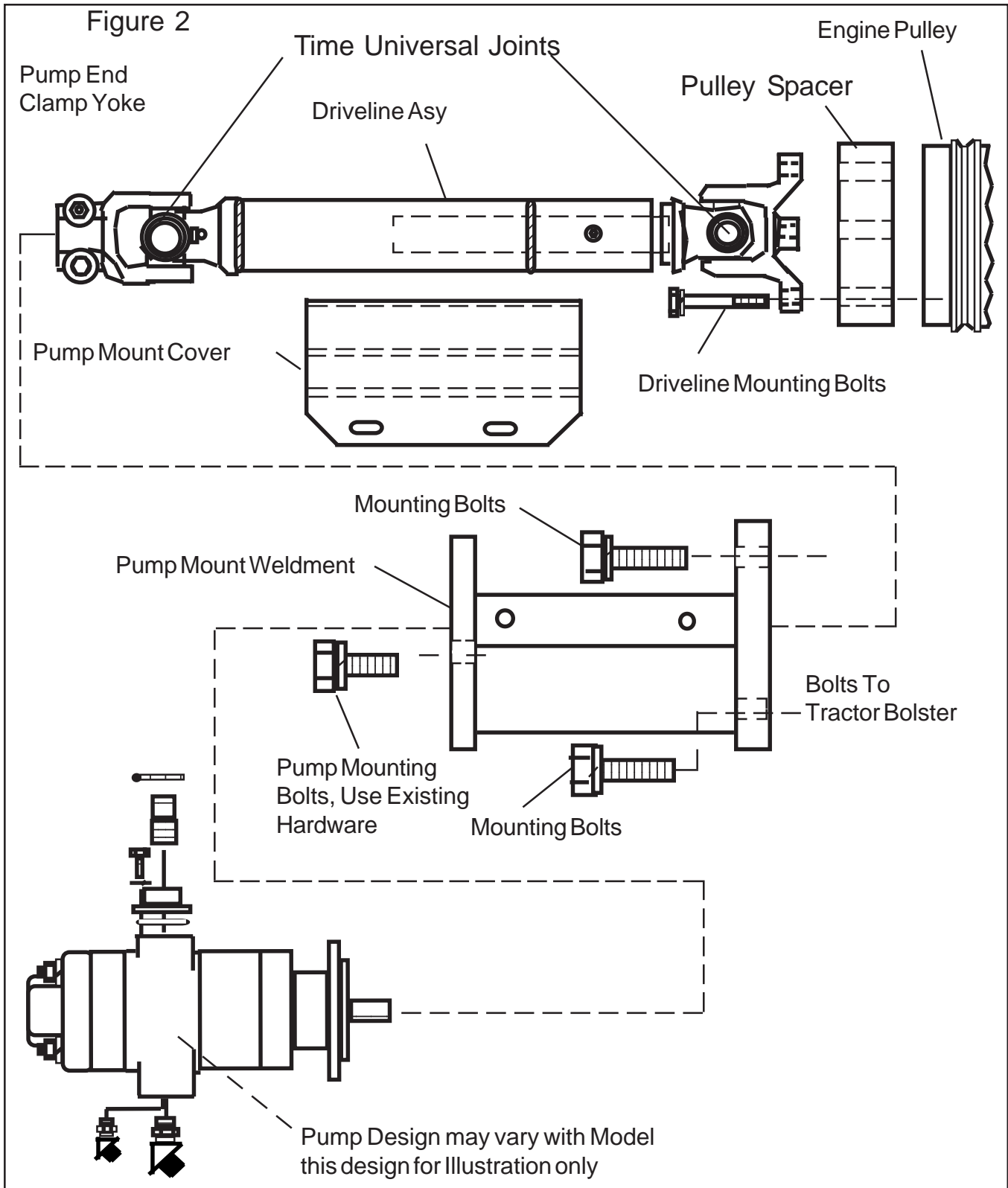


Figure 1

Tank Rail Weldment



Information Bulletin 011304 Continued from previous Page



**TECHNICAL INFORMATION BULLETIN**  
**No. 011304**

This document does not authorize the repair or replacement of parts under warranty

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# NOTES

# SECTION 2

## SERVICE BULLETINS

(This Book is divided into two Sections)

### Section Two - Service Bulletins

1. **Service Bulletin No:** Service Bulletins are listed by Bulletin Number (Date). Example the oldest Bulletin will be listed first and the most recent bulletin will be listed last. If more than one bulletin was written on that day the a dash with a number will added, example -1, -2 etc.
2. **Repairs:** Service Bulletins are intended to authorize only the repairs listed on It to be made under warranty or any other circumstance unless specifically instructed to do so.
3. **Parts:** This is the Rate at which compensation will be allowed under warranty for repair parts.
4. **Labor:** This is the amount of labor (hours) that are allowed to make this repair under warranty.
5. **Parts Disposition:** Service Bulletins list the disposition of any parts that are removed during the repair. If listed removed parts must be held awaiting return to factory if instructed to do so.
6. **Termination Date:** Service bulletins show a termination date, this is the date that the Bulletin will be discontinued, Any repairs must be made and all warranty applications filed by the listed date.
7. All Service Bulletins printed in this Manual will void any previously printed Bulletins. Any changes in these bulletins are the final version as of the date of this manual.



**SERVICE BULLETIN No. 951611**

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |  |  |
|---|---|--|--|
| <b>Models: Machete Boom Mowers</b><br><b>S/N MB21-01002, 01003, 01004, 01006, 01007, 01008</b><br><b>S/N MB24-PT002, 01002, 01003, 01004, 01005, 01006, 01007</b> |   | <b>Bulletin No:</b><br>951611<br>(Old # 950011)                    | <b>Date:</b><br>Nov. 16, 1995            |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>0.5 hr. at Dealer registered Shop Rate | <b>Old Parts Disposition:</b><br>Hold all removed parts for return | <b>Termination Date:</b><br>Feb. 1, 1996 |

**Joystick Replacement:**

**Subject:**

The electronic console (Joystick Controls) must be replace on the above listed mowers.

**Service Required:**

1. Disconnect wiring harness from console at connector at the bottom of control box.
2. Remove the bolts attaching console to stand and install new console.
3. Reconnect to wiring harness, test for proper operation

**Parts Required:**

| Part No. | Qty | Description         |
|----------|-----|---------------------|
| 02969819 | 1   | Joystick Controller |

See Operators manual or Service Manual for Wire Harness connections.

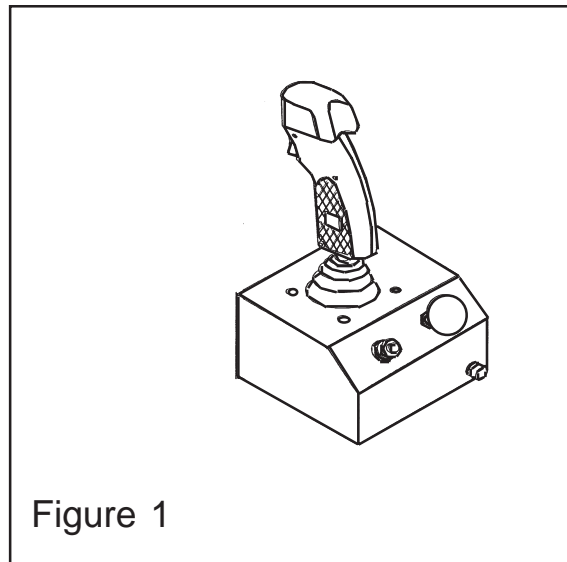


Figure 1

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



## SERVICE BULLETIN No. 952911-1

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |  |  |  |
|---|--|--|--|
| <b>Models: Machete Boom Mowers</b><br><b>S/N MB21-01002, 01003, 01004, 01006, 01007, 01008</b><br><b>S/N MB24-PT002 through 01007</b> |  | <b>Bulletin No:</b><br>952911-1<br>(Old # 950014)                | <b>Date:</b><br>Nov. 29, 1995            |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>0.7 hr. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>No Returnable Parts<br>involved | <b>Termination Date:</b><br>May. 1, 1996 |

### Motor to Spindle Bolt Replacement:

#### Subject:

Replace motor to spindle bolts with longer bolts. Original Bolts may not keep Motor tight to spindle.

#### Service Required:

1. Clean the head, especially the area around the Motor and Spindle connection. Remove the four bolts which attach the motor to the spindle. Lift the motor off the spindle and place it to the side.
2. Place a clean lint free rag over the bearings in the spindle to protect them from contamination.
3. Clean the flange surface of both the motor and spindle of any gasket material or oil.
4. Clean and inspect the threads in the holes, use a thread tap to clean them if needed. Check to be certain the holes are drilled all the way through the housing, this is important as you will be installing longer bolts.
5. Check the surface on the motor where the bolt head tightens. It may be required to file a small portion of this surface in order to allow for a flat surface onto which the bolt head can tighten.
6. Remove the rag, and check to be sure that the spindle is properly lubed.
7. Apply a coating of silicone gasket material to the motor and spindle housing flanges.
8. Apply a small drop of Loctite to each of the four new bolts.
9. Install the motor and the four new bolts and tighten them to the proper torque (120 ft. lbs.).

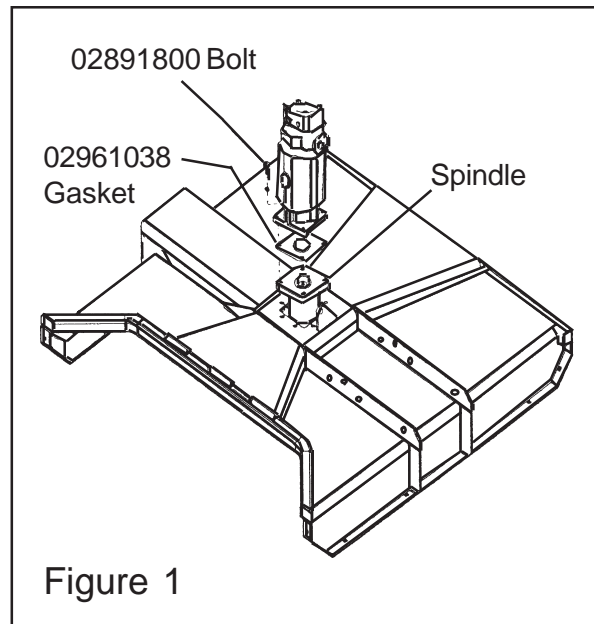


Figure 1

#### Parts Required:

| Part No. | Qty | Description |
|----------|-----|-------------|
| 02891800 | 4   | Bolts       |
| 02961038 | 1   | Gasket      |

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

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## SERVICE BULLETIN No. 952911-2

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |  |   |  |
|---|--|---|--|
| <b>Models: Machete Boom Mowers</b><br><b>S/N MB21-01002, 01003, 01004, 01006, 01007, 01008</b><br><b>S/N MB24-PT002 through 01007</b> |  | <b>Bulletin No:</b><br>952911-2<br>(Old # 950013) | <b>Date:</b><br>Nov. 29, 1995            |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>0.7 hr. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>Scrap old Parts  | <b>Termination Date:</b><br>May. 1, 1996 |

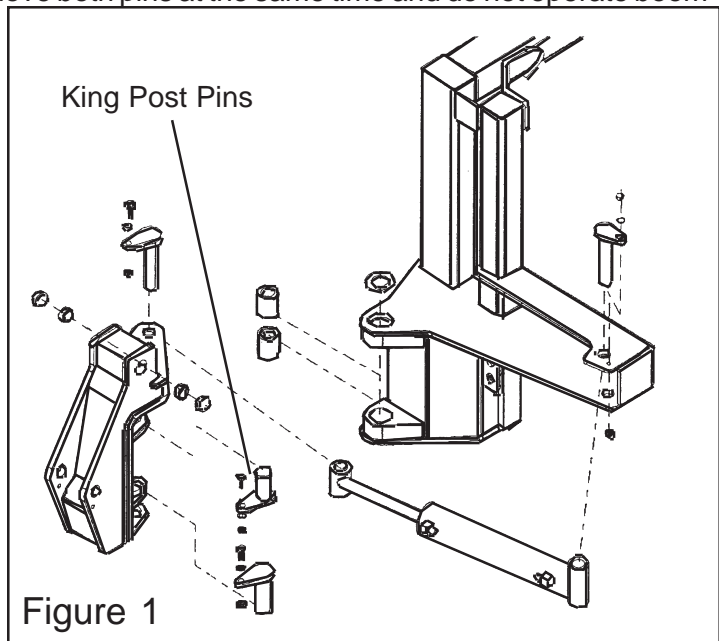
### King Post Pin Replacement: (Longer Pins)

#### Subject:

Replace King Post Pins with new longer pins

#### Service Required:

1. Measure the length of the bottom king post pin, this can be done without any disassembly.
2. If Pin measurement is 5-1/4" to 5-3/8", this procedure will not be required.
3. If measurement is 5" or less, replace the pins according to the correct replacement procedure as outlined in the operators manual and / or Service Manual.
4. Boom must be flat on the floor and boom must be supported with a Hoist. All Hydraulic pressure must be released for all cylinder. See Machete service manual for this procedure.
5. Remove the pins one at a time, do not remove both pins at the same time and do not operate boom or tractor until these jobs are finished. Install the new pin. It may be required to move boom to align pins. Moving boom can usually be done by using the hoist supporting the Boom
7. Do Not drive pins in with a Hammer to align pins, This will damage the component



#### Parts Required:

| Part No. | Qty | Description   |
|----------|-----|---------------|
| 02966797 | 2   | King Post Pin |

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

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# NOTES



**SERVICE BULLETIN No. 962503-1**

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |  |   |
|---|---|--|---|
| <b>Models:</b> Machete Boom<br>S/N MB21-01001 to 01020 (& PT002)<br>S/N MB24-01001 to 01017 (& PT002) |   | <b>Bulletin No:</b><br>962503-1<br>(Old # 960001)                | <b>Date:</b><br>Mar. 25, 1996             |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>1.0 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>No Returnable Parts<br>involved | <b>Termination Date:</b><br>Sep. 30, 1996 |

**Rear Flap Bracket, Machete Rotary Head:**

**Subject:**

Install rear flap bracket on Machete Rotary Heads. Brackets will aid in deflecting material away from the tractor.

**Service Required:**

1. All units with Rotary Heads will be affected in the modification.
2. Secure tractor so it can not be started until you are ready to start it, this will prevent some one from starting tractor while you are working on it.
2. Clean area to be welded of paint and debris. Align and Weld bracket to head as described in Figure 2. Clean weld and repaint area as needed.
3. Bolt Flap to new bracket using hardware provided.

**Parts Required:**

| Part No. | Qty | Description                            |
|----------|-----|--|
| 02970461 | 1   | Bracket                                |
| 00007000 | 1   | Bolt                                   |
| 00011100 | 2   | Flatwasher                             |
| 00015800 | 1   | Locknut                                |
| 63096300 | 1   | Paint, Spray Can,<br>Industrial Yellow |

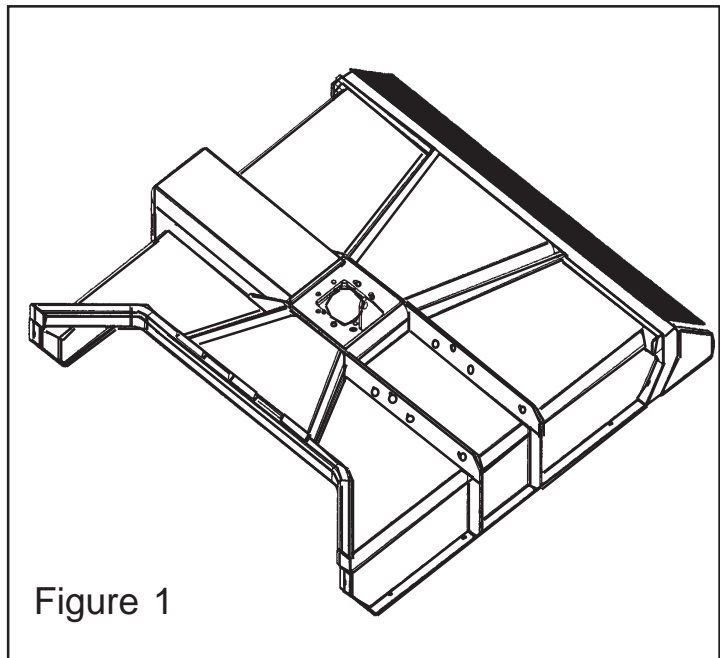


Figure 1

The above parts will have to be ordered separately, they do not come in a kit.

**Continued Next Page**

**MACHETE**



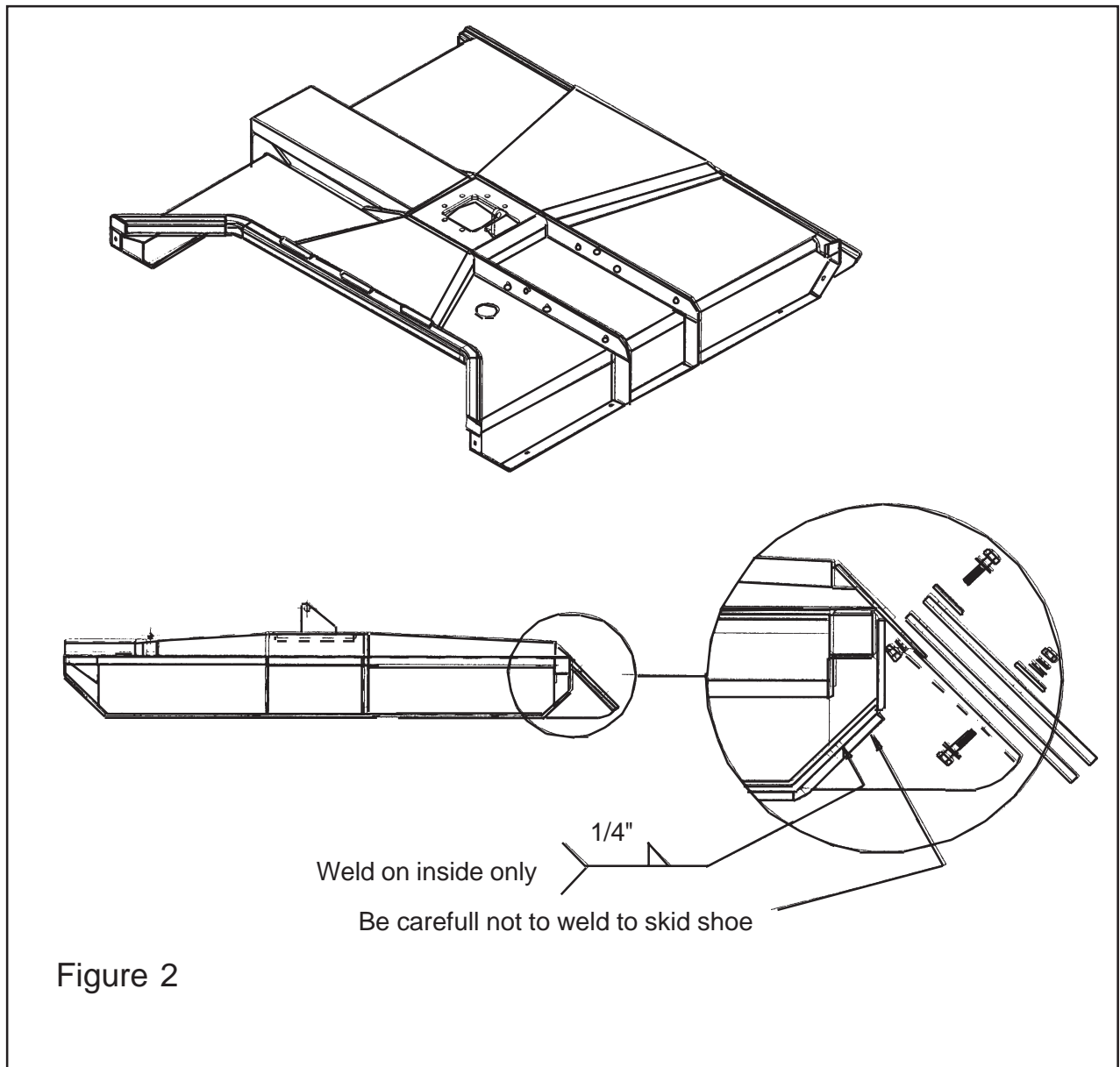


Figure 2

## ***SERVICE BULLETIN*** ***No. 962503-1***

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



## SERVICE BULLETIN No. 962503-2

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |  |  |  |
|--|--|--|--|
| <b>Models:</b> Machete Boom Mowers<br>S/N MB21-01001 to 01015 (& PT002)<br>S/N MB24-01001 to 01012 (& PT002) |  | <b>Bulletin No:</b><br>962503-2<br>(Old # 960002)                | <b>Date:</b><br>Mar. 25, 1996            |
| <b>Parts:</b><br>100 % at Dealer Net   | <b>Labor:</b><br>2.0 hr. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>No Returnable Parts<br>involved | <b>Termination Date:</b><br>Oct. 1, 1996 |

### Lower Crossmember Kit Installation:

#### Subject:

Install lower frame rail crossmember kit to reduce frame rail deflection and movement.

#### Service Required:

1. Install Crossmember between frame rails under tractor and aligned with the upright section of frame rails as shown in figure 1.
2. Using large C-Clamps clamp the crossmember uprights to the frame rails. The bolts in the crossmember will need to be loose when you do this, the holes for these bolts are slotted.
3. Weld the uprights of the cross member to the upright of the frame rail on both sides. retighten the bolts in cross member. Cleand welded are and repaint welded are and crossmember. 2 Cans Spay Paint, High Gloss Black (Obtain Locally)

#### Parts Required:

| Part No. | Qty | Description            |
|----------|-----|------------------------|
| 02970118 | 1   | Frame Rail Support Kit |

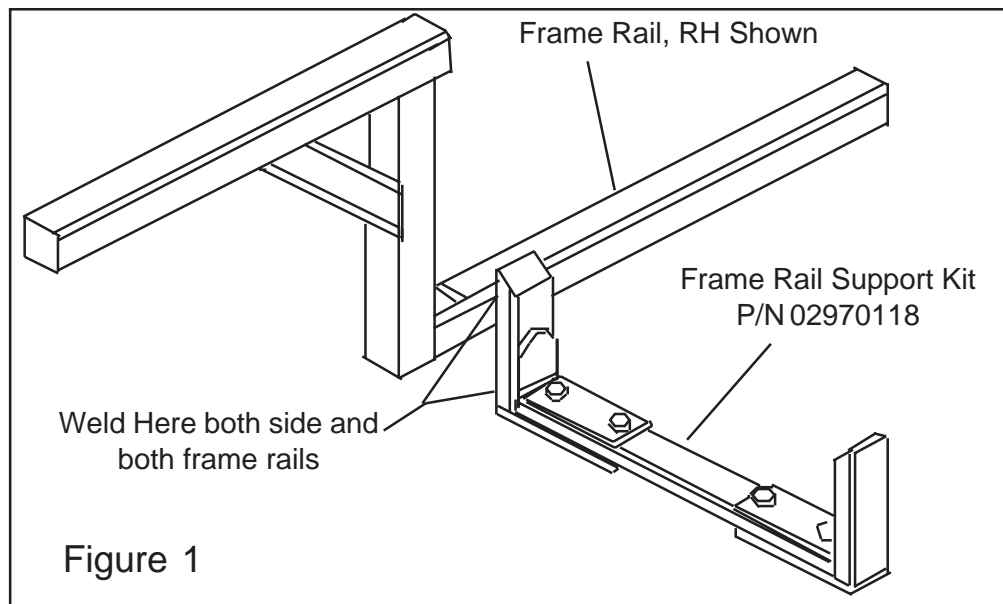


Figure 1

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

**MACHETE**



## SERVICE BULLETIN No. 962703

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |  |  |  |
|--|--|--|--|
| <b>Models:</b> Machete Boom Mowers & A-Boom Mowers |  | <b>Bulletin No:</b><br>962703<br>(Old # 960003)                  | <b>Date:</b><br>Mar. 27, 1996            |
| <b>Parts:</b><br>100 % at Dealer Net               | <b>Labor:</b><br>1.0 hr. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>No Returnable Parts<br>involved | <b>Termination Date:</b><br>Oct. 1, 1996 |

### Frame Rail Reinforcement, LH Frame Rail:

#### Subject:

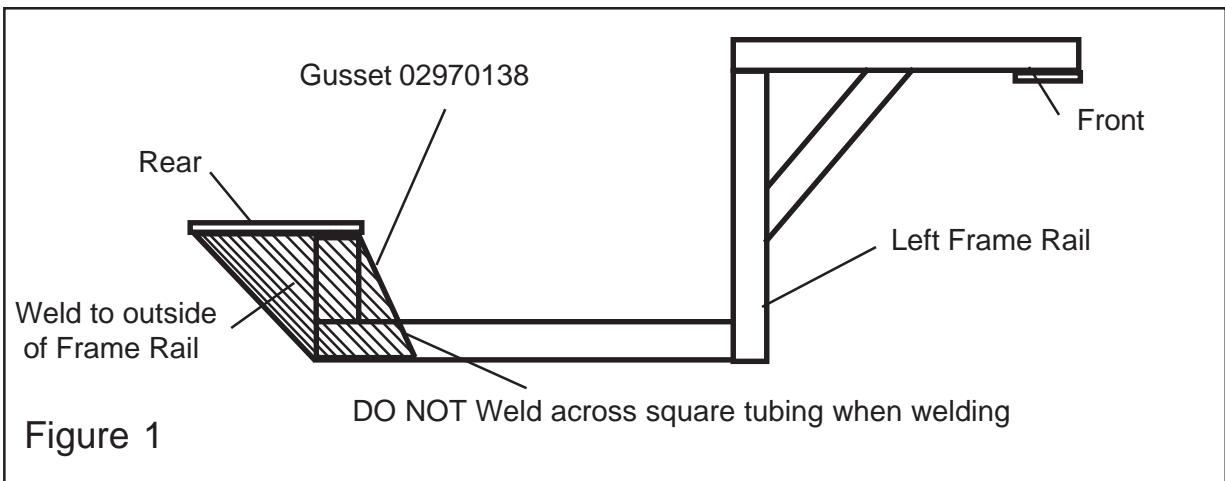
Add Gusset to Left Frame rail of certain A-Booms and Machetes

#### Service Required:

1. Weld Gusset, P/N 02970138 to left frame rail as instructed on installation drawing which will be sent with Gusset when ordered.
2. When welding something on a square tube do not weld across the square tube, that will weaken the square tube. Always try to weld the length of the tube on the corners.
3. Paint Gusset and welded area.

#### Parts Required:

| Part No. | Qty | Description                                       |
|----------|-----|---|
| 02970138 | 1   | Gusset  |
| -----    | 1   | Can Spay Paint, High Gloss Black (Obtain Locally) |



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



## SERVICE BULLETIN No. 962310

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |  |   |  |
|---|--|---|--|
| <b>Models: Machete Boom Mowers</b><br><b>S/N MB21-01001 &amp; Up (except 01044)</b><br><b>S/N MB24-01001 &amp; Up</b> |  | <b>Bulletin No:</b><br>962310<br>(Old # 960008)                       | <b>Date:</b><br>Oct. 23, 1996            |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>0.7 hr. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>Hold all removed parts for<br>return | <b>Termination Date:</b><br>Feb. 1, 1997 |

### Joystick Control of Boom Movement:

#### Subject:

Lack of proportional control of the Boom Movement may develop due to the joy stick controls.

#### Service Required:

- Operated Boom controls for the lift, dipper and swing function. The Cylinder speeds should be able to be controlled from very slow to fast without jerking or sudden stop.
- If lift, dipper and swing function operates smoothly and speeds can be controlled, No service will be required joystick is working correctly.
- If lift, dipper or swing function do not operate smoothly, it will be necessary to replace the joystick control box. Alamo Industrial through testing has found some joysticks were not properly adjusted from the factory. The returned joysticks have been readjusted, rebuilt and tested. The rebuilt joystick will be used in this repair.
- Make certain the ignition switch is in the "OFF" position. Remove the wiring harness from the bottom of the control box by unscrewing the connector. Remove the mounting bolts from the bottom of the control box and remove the box.
- Install the replacement control box (Joystick) in the reverse order and test operate unit.

#### Parts Required:

| Part No.   | Qty | Description         |
|------------|-----|---------------------|
| 02969819RB | 1   | Joystick Controller |

See Operators manual or Service Manual for Wire Harness connections.

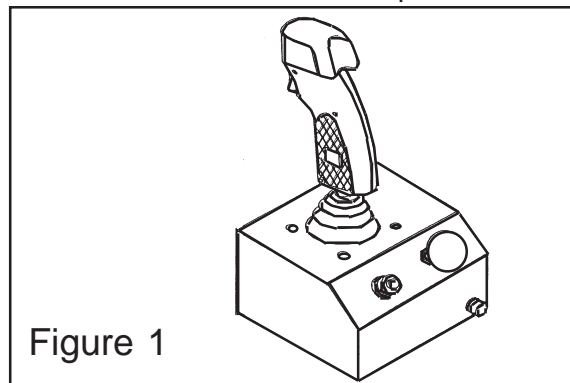


Figure 1

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

**MACHETE**



## SERVICE BULLETIN No. 960511

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|                                      |   |  |  |
|--------------------------------------|---|--|--|
| <b>Models:</b> Machete Boom Mowers   |   | <b>Bulletin No:</b><br>960511<br>(Old # 960009)                  | <b>Date:</b><br>Nov. 5, 1996             |
| <b>Parts:</b><br>100 % at Dealer Net | <b>Labor:</b><br>1.0 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>No Returnable Parts<br>involved | <b>Termination Date:</b><br>Feb. 1, 1997 |

### Restrictor Installation Tilt Cylinder Function:

#### Subject:

Cutting Head Tilt function drops too fast. Install one-way restrictor in tilt circuit to reduce the lowering speed of the tilt function.

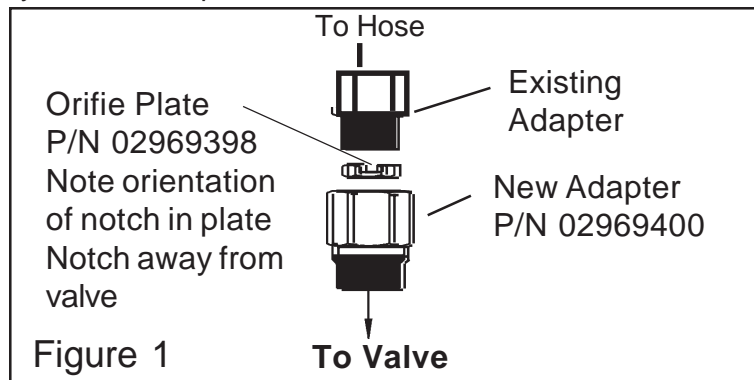
#### Service Required:

1. Remove the cover from the control valve, clean the control valve of all debris to prevent contamination from entering system. Make certain that Boom is lower with head resting on the floor. Make certain that all pressure is relieved from the system and all hoses.
2. Remove and plug the hose from the rod end of the tilt cylinder (Red Tag) at the valve. Remove the adapter from the valve.
3. Install the new adapter (# 02969400), orifice plate and old adapter as shown in figure 1. Be certain that the groove in the orifice plate is installed as shown. The Groove should be away from valve.
4. Reassemble the machine and clean any spilled oil. Test for operation by running through its cycle to remove any trapped air in system and inspect for leaks.

#### Parts Required:

| Part No. | Qty | Description         |
|----------|-----|---------------------|
| 02969400 | 1   | Straight Adapter    |
| 02969398 | 1   | Orifice Plate .055" |

See Operators manual or Service Manual for Port locations on valve if needed.



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



## SERVICE BULLETIN No. 971903

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |  |  |
|---|---|--|--|
| <b>Models:</b> Machete Boom Mowers<br>Manufactured prior to Mar. 1997 |   | <b>Bulletin No:</b><br>971903<br>(Old # 970001A)                                 | <b>Date:</b><br>Mar. 19, 1997            |
| <b>Parts:</b><br>100 % at Dealer Net                                  | <b>Labor:</b><br>2.5 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>Hold any removed parts<br>for warranty decision | <b>Termination Date:</b><br>Sep. 1, 1997 |

### Turning Arm - King Pin Upgrades:

**Subject:**

Boom Hinge Point Pin Upgrades. These repairs are covered in detail on Technical Information Bulletins #041797-1 and #041797-2. These Technical Information Bulletins must be consulted for detailed instructions for performing the following repairs. Also use Instruction Sheet that will be included with the Pin Kits

**Service Required:**

1. See Technical Information Bulletins #041797-1 and #041797-2 for detailed instructions on how to perform these modifications.
2. Caution must always be used when installing new bushing and when aligning the pins. Do Not try to align the pins by hitting it with a hammer, See operators manual for correct way to align pins and install bushings. It is recommended that bushings be installed with a bushing driver, these Bushing drivers are available from Alamo Industrial (See Technical Information Bulletin # 032697).

**Parts Required:**

**Turning Arm - King Pin Replacement Kits:**  
 (Qty use 1 each)

| Part No. | Description                     |
|----------|---------------------------------|
| 02972211 | 1 Turning Arm Kit               |
| 02967679 | 1 Lift Cyl. Pin Kit, Barrel End |
| 02967675 | 1 Swing Cyl. Pin Kit, Rod End   |
| 02967689 | 1 Main Pin Replacement          |

Note: Instruction Sheet is included in Kit. Check with Service Bulletin 972103 (970002A) and 971903 (970001A) as these service bulletins use some of the same parts and cover some of the same upgrades, so when ordering parts for this service bulletin check so duplicate parts (kits) are not ordered.

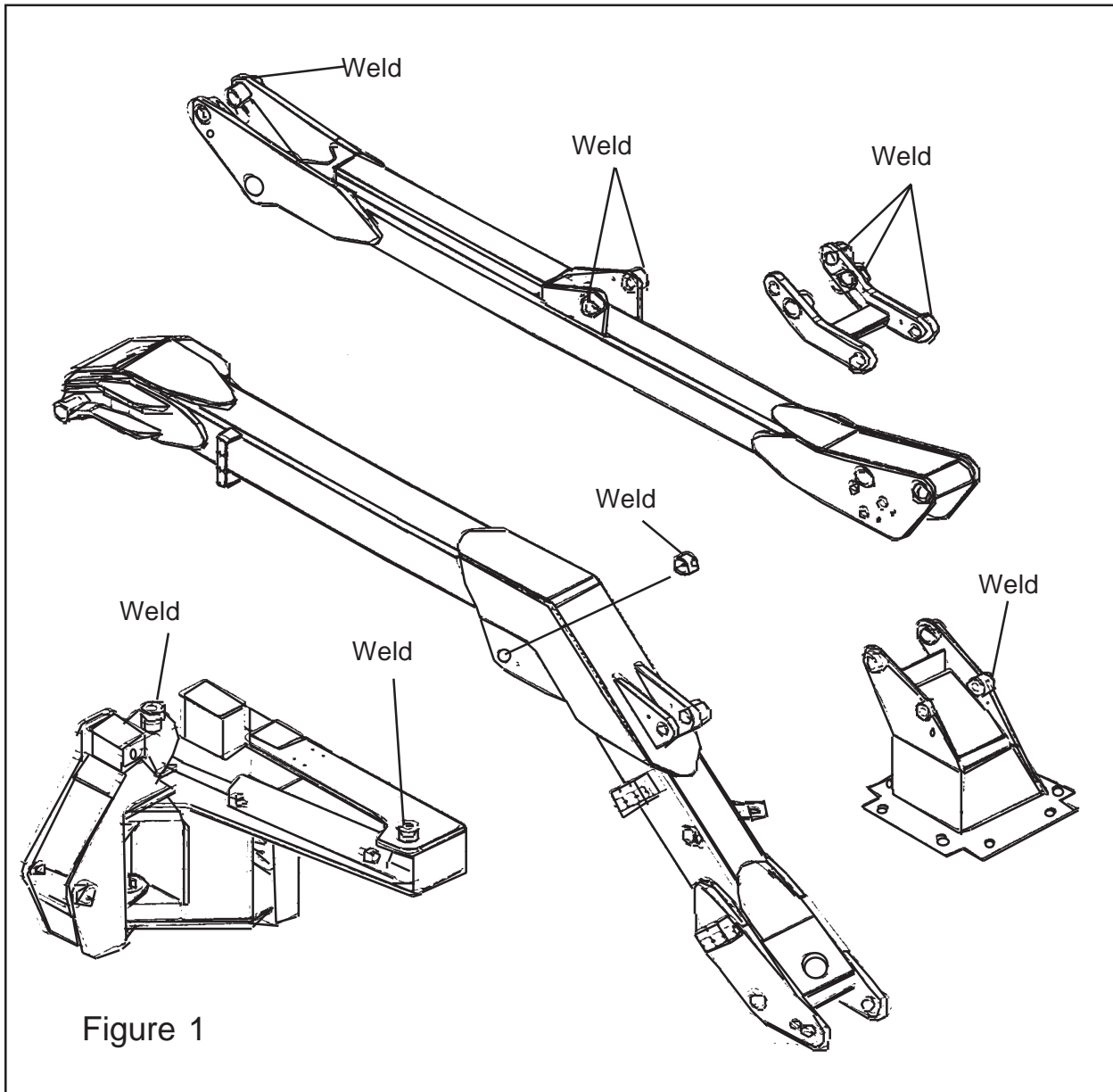


Figure 1

**SERVICE BULLETIN**  
**No. 971903**

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

NOTE: The printing of this Service Bulletin on Oct. 22, 2003 will void any previous versions of this bulletin number.

MACHETE



## SERVICE BULLETIN No. 972103

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |  |  |
|---|---|--|--|
| <b>Models:</b> Machete Boom Mowers<br>Manufactured prior to Mar. 1997 |   | <b>Bulletin No:</b><br>972103<br>(Old # 970002A)                                 | <b>Date:</b><br>Mar. 21, 1997            |
| <b>Parts:</b><br>100 % at Dealer Net                                  | <b>Labor:</b><br>2.5 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>Hold any removed parts<br>for warranty decision | <b>Termination Date:</b><br>Sep. 1, 1997 |

### Boom Hinge Point Pin Upgrades:

**Subject:**

Boom Hinge Point Pin Upgrades. These repairs are covered in detail on Technical Information Bulletins # 041797-1 and # 041797-2. These Technical Information Bulletins must be consulted for detailed instructions for performing the following repairs. Also use Instruction Sheet that will be included with the Pin Kits

**Service Required:**

1. See Technical Information Bulletins # 041797-1 and # 041797-2 for detailed instructions on how to perform these modifications.
2. Caution must always be used when installing new bushing and when aligning the pins. Do Not try to align the pins by hitting it with a hammer, See operators manual for correct way to align pins and install bushings. It is recommended that bushings be installed with a bushing driver, these Bushing drivers are available from Alamo Industrial (See Technical Information Bulletin # 032697). **Use Loctite 271 brand adhesive when installing new bushings**
3. **Install the top bushing flush with the bottom side and the bottom bushing flush with the top side, this is because turning will have to go between lugs of frame.**

**Parts Required:**

**Hitch Post Replacement Kits:**  
 (Qty use 1 each)

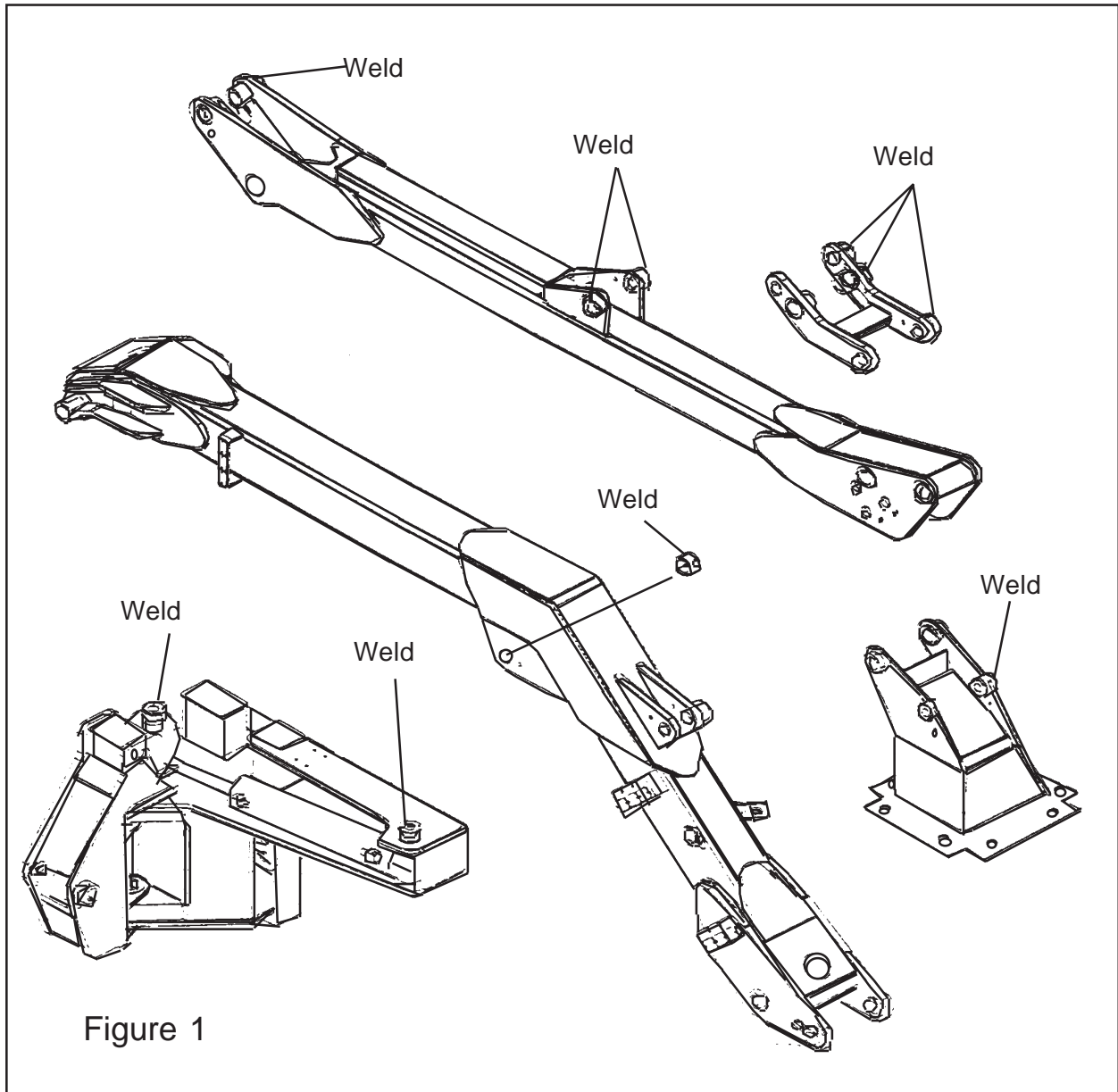
| Part No. | Description                |
|----------|----------------------------|
| 02967689 | 1 Main Pin                 |
| 02967693 | 1 Dipper to Lift Pin       |
| 02967687 | 1 Dipper to Hitch Post Pin |
| 02968803 | 8 Bushings                 |

Note: Instruction Sheet is included in Kit. Check with Service Bulletin 972103 (970002A) and 971903 (970001A) as these service bulletins use some of the same parts and cover some of the same upgrades, so when ordering parts for this service bulletin check so duplicate parts (kits) are not ordered.

MACHETE

**Continued Next Page**





## ***SERVICE BULLETIN*** ***No. 972103***

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

NOTE: The printing of this Service Bulletin on Oct. 22, 2003 will void any previous versions of this bulletin number.

**MACHETE**



## SERVICE BULLETIN No. 971404

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|                                      |  |   |  |
|--------------------------------------|--|---|--|
| <b>Models:</b> Machete Boom Mowers   |  | <b>Bulletin No:</b><br>971404<br>(Old # 970004A)              | <b>Date:</b><br>Apr. 14, 1997            |
| <b>Parts:</b><br>100 % at Dealer Net | <b>Labor:</b><br>1.5 hrs. at Dealer registered Shop Rate | <b>Old Parts Disposition:</b><br>No Returnable Parts involved | <b>Termination Date:</b><br>Oct. 1, 1997 |

### Restrictor Installation Lift & Dipper Cylinder Function:

#### Subject:

Lift and/or dipper functions drop to fast. When both functions are combined, sudden drop may occur. Install one way restrictors in the dipper cylinder rod end port and the tilt cylinder barrel end port of the control valve to prevent the sudden drop of the boom and damage to the boom and frame.

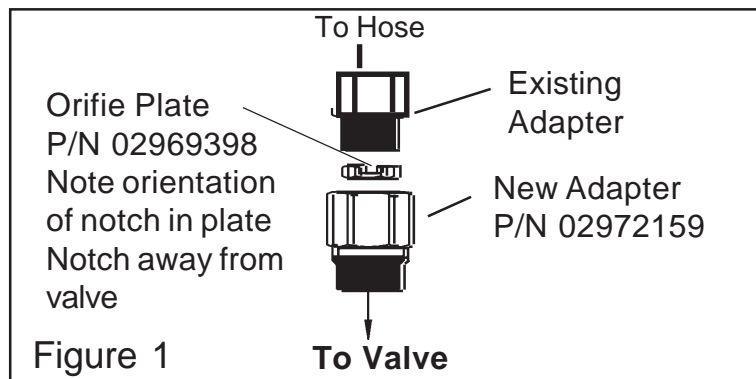
#### Service Required:

1. Remove the cover from the control valve, clean the control valve of all debris to prevent contamination from entering system. Make certain that Boom is lower with head resting on the floor. Make certain that all pressure is relieved from the system and all hoses.
2. Remove and plug the hose from the rod end of the dipper cylinder (Blue Tag) at the valve. Remove the adapter from the valve.
3. Install the new adapter (# 02972159), orifice plate and old adapter as shown in figure 1. Be certain that the groove in the orifice plate is installed as shown. Perform the same procedure to the barrel end of the lift cylinder valve port (Orange and White Tag)
4. Reassemble the machine and clean any spilled oil. Test for operation by running through its cycle to remove any trapped air in system and inspect for leaks.

#### Parts Required:

| Part No. | Qty | Description         |
|----------|-----|---------------------|
| 02972159 | 2   | Straight Adapter    |
| 02969398 | 2   | Orifice Plate .055" |

See Operators manual or Service Manual for Port locations on valve if needed.



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



## SERVICE BULLETIN No. 973107

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |  |   |
|---|---|--|---|
| <b>Models: Machete Boom</b><br><b>S/N MB21-01109 &amp; Up</b> + MB21-01001 to 01108 that have been updated<br><b>S/N MB24-01046 &amp; Up</b> + MB24-01001 to 01045 that have been updated |   | <b>Bulletin No:</b><br>973107<br>(Old # 970008A)                         | <b>Date:</b><br>Jul. 31, 1997             |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>3.5 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>Retain All parts for<br>Warranty Return | <b>Termination Date:</b><br>Nov. 15, 1997 |

### Upper King Pin Bushing Slipping:

#### Subject:

It is possible that the upper King Pin Bushing may loose retention and work down from the bore. This could result in damage to the frame, Pin and Arm.

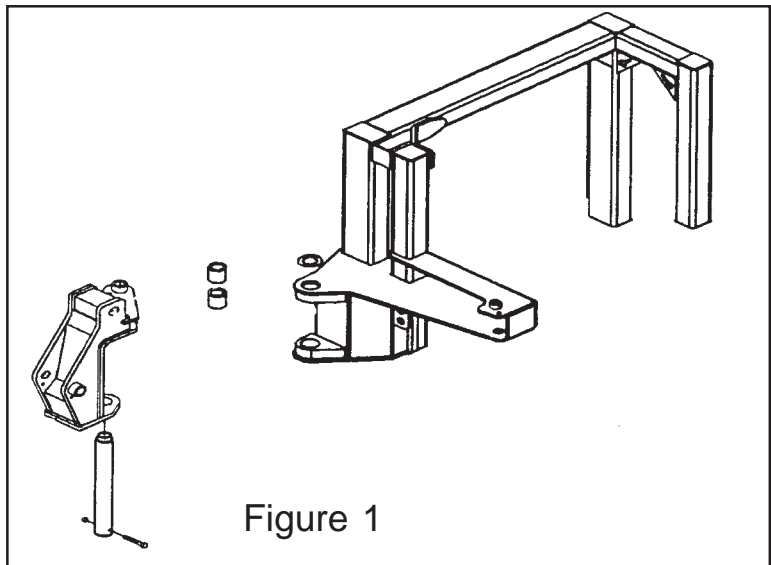
#### Service Required:

1. Visually inspect the bushing location in the top king pin bore. The bushing should be flush with the bottom of the bore.
2. If the Bushing is in the proper place there will be no need to make this repair.
3. If the bushing appears to have moved downward in the bore, refer to the King Pin bushing replacement section in the operators manual / Service Manual for the proper procedure to support the boom while removing it. The turning arm and boom will need to be removed.

Using Locktite Brand 271 adhesive (Purchased Locally) Install new bushings in the upper and lower Pin holes. Use proper Drivers when installing bushings.

#### Parts Required:

| Part No. | Qty | Description        |
|----------|-----|--------------------|
| 02968804 | 2   | King Pin Bushing   |
| -----    | 1   | Locktite Brand 271 |



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



**SERVICE BULLETIN No. 970108**

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |   |  |   |
|--|---|--|---|
| <b>Models: Machete Boom<br/>MR 60" Rotary Heads S/N 01039 &amp; Up</b> |   | <b>Bulletin No:</b><br>970108<br>(Old # 970009A) | <b>Date:</b><br>Aug. 1, 1997              |
| <b>Parts:</b><br>100 % at Dealer Net                                   | <b>Labor:</b><br>1.0 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>Scrap Old Parts | <b>Termination Date:</b><br>Aug. 31, 1997 |

**Blade Bolt Inspection / Recall:**

**Subject:**

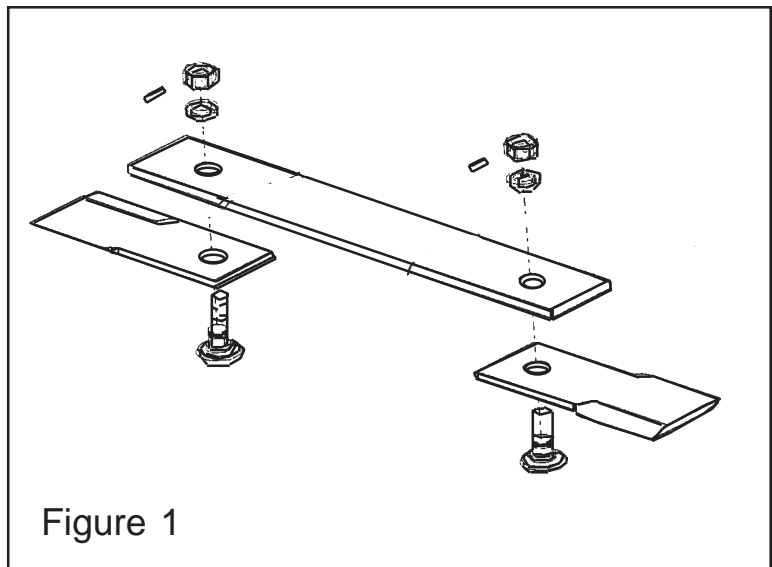
The Blade Bolt Nut Retaining Roll Pin Bore may be oversized and could allow the roll pin to become loose in the bore. The loose roll pin could therefore allow the blade bolt Nut to loose torque.

**Service Required:**

1. Visually inspect and check the fit of the roll pin. If it is loose or has come loose replace the Blade Bolt, Blade Bolt Nut and Roll Pin on the above listed serial numbered units.
2. Torque the Blade Bolt to 600 ft. lbs. before installing the new Roll Pin.

**Parts Required:**

| Part No. | Qty | Description |
|----------|-----|-------------|
| 02782900 | 2   | Blade Bolt  |
| 00020900 | 2   | Nut         |
| 00023200 | 2   | Roll Pin    |



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



## SERVICE BULLETIN No. 990303

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |  |   |
|---|---|--|---|
| <b>Models:</b> Machete Boom mounted on JD 6000 2 & 4 WD<br>S/N MB21-01001 to 01324<br>S/N MB24-01001 to 01165 |   | <b>Bulletin No:</b><br>990303<br>(Old # 990002A)                 | <b>Date:</b><br>Mar. 3, 1999              |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>4.8 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>No Returnable Parts<br>involved | <b>Termination Date:</b><br>Jul. 31, 1999 |

### Lower Cross Member Reinforcement Kit P/N 02974182:

#### Subject:

Support gussets have been added to the lower crossmember frame support

#### Service Required:

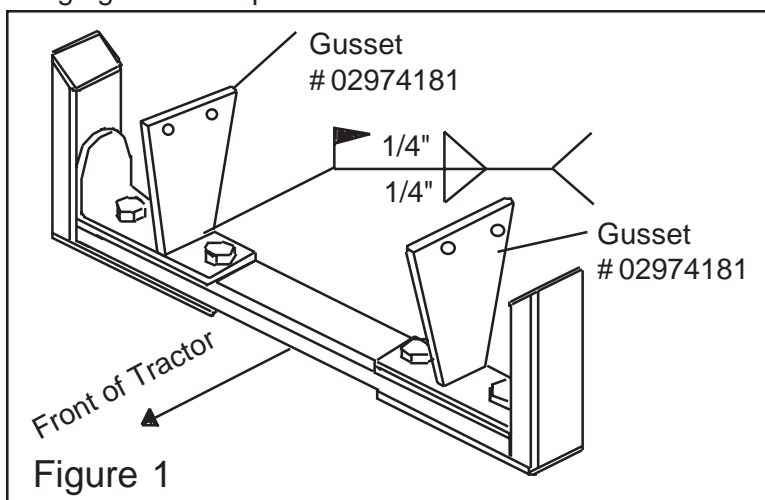
1. Secure the tractor to facilitate a safe repair, (Engine off, Park brake on, Key Secured & etc..).
2. Using the hardware provided, line up the holes in the plates with the those in the tractor frame and attach the gusset plates to each side of the tractor over the lower crossmember as shown in the drawing provided with the kit. NOTE: The gusset is made at an exaggerated length to accommodate the possibility of varying distances between the crossmember and the tractor frame. Some trimming of the gusset may be required.
3. Utilize a continuous 1/4" weld to attach the bottom of the gusset to the lower crossmember between the two crossmember bolts on each side of the tractor as illustrated in figure 1 and in the assembly drawing provided with the kit. Weld both sides of gusset.
4. Torque the four mounting bolts that attach gussets to tractor frame to 300 ft. lbs. (407 Nm)
5. Clean the welded area and paint with high gloss Black paint.

#### Parts Required: (order Kit #02974182)

| Part No. | Qty | Description        |
|----------|-----|--------------------|
| 02974182 | 1   | Support Gusset Kit |

#### P/N 02974182 Kit includes

| Part No. | Qty | Description         |
|----------|-----|---------------------|
| 02974181 | 2   | Rail Gusset         |
| 00000200 | 4   | Nut                 |
| 00003901 | 4   | Lockwasher          |
| 02978600 | 4   | Bolt                |
| 02977386 | 1   | Instruction Drawing |



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



**SERVICE BULLETIN No. 992704**

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |   |   |   |
|--|---|---|---|
| <b>Models: New Holland tractors T7740 &amp; T6640</b><br><b>(S/N Range listed below)</b><br><b>New Holland Tractors with Alamo Industrial Units mounted on them (only S/N and model tractors listed below)</b> |   | <b>Bulletin No:</b><br>992704<br>(Old # 990003A)                        | <b>Date:</b><br>Apr. 27, 1999             |
| <b>Parts:</b><br>100 % at Dealer Net   | <b>Labor:</b><br>0 hr. (See New Holland Service Bulletin 399) | <b>Old Parts Disposition:</b><br>(see New Holland Service Bulletin 399) | <b>Termination Date:</b><br>Sep. 30, 1999 |

**New Holland T7740 & T6640 A/C Drier Campaign:**

**Subject:**

In order to increase customer satisfaction, New Holland is providing a new Air conditioner Receiver Drier Kit for the S/N units detailed in new Holland Service Campaign 399. The specifics to this bulletin are provided by the New Holland Bulletin, The purpose of this bulletin is only to inform you of the work that needs to be done per New Holland Bulletin and not to authorize any work on the behalf of Alamo Industrial or any of their affiliated companies. If in Question you should consult your New Holland Dealer for details of repairs.

**Units Serial Numbers: (Model T 7740)**

084228B 084349B 084350B 084352B 084359B 084476B 084549B 084550B 084570B 084571B  
 084599B 084627B 084629B 084632B 084633B 084635B 084636B 084647B 084648B 084652B  
 084661B 084800B 084850B 084964B 084966B 084967B 085607B 086462B 086470B 086471B  
 086472B 086503B 086504B 086505B 086589B 086648B 086649B

**(Model T6640)**

084230B 084351B 084411B 084412B 084526B 084529B 084816B 084818B 084832B 084833B  
 084834B 084847B 084849B 084963B 084965B 086484B 086485B 086486B 086487B 086488B

**Service Required:**

See New Holland Service Campaign 399 for Service details.

**Parts Required:**

See New Holland Service Campaign 399 for Parts requirements

**Special Note:**

This Service Bulletin does not authorize any repairs on behalf of Alamo Industrial, its strictly to inform you of New Holland Service Campaign 399.

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



**SERVICE BULLETIN No. 991911**

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |   |   |
|---|---|---|---|
| <b>Models:</b> All New Holland TS Tractors w/ Cabs & S/N less than 115012B (date code 8L18) plus All New Holland TS Tractors with or without Cab & S/N less than 110026B (date code 8j09) |   | <b>Bulletin No:</b><br>991911<br>(Old # 990005A)                        | <b>Date:</b><br>Nov. 19, 1999             |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>0 hr. (See New Holland Service Bulletin 409) | <b>Old Parts Disposition:</b><br>(see New Holland Service Bulletin 409) | <b>Termination Date:</b><br>Apr. 30, 2000 |

**New Holland TS Tractor Inspection Campaign:**

**Subject:**

In order to increase customer satisfaction, New Holland is requesting inspection of some tractors (See S/N's listed below) detailed in new Holland Service Campaign 409. The specifics to this bulletin are provided by the New Holland Bulletin, The purpose of this bulletin is only to inform you of the work that needs to be done per New Holland Bulletin and not to authorize any work on the behalf of Alamo Industrial or any of their affiliated companies. If in Question you should consult your New Holland Dealer for details of repairs.

**Units Serial Numbers:**

All New Holland TS Tractors w/ Cabs & S/N less than 115012B (date code 8L18) plus All New Holland TS Tractors with or without Cab & S/N less than 110026B (date code 8j09)

**Service Required:**

See New Holland Service Campaign 409 for Service details.

**Parts Required:**

See New Holland Service Campaign 409 for Parts requirements

**Special Note:**

This Service Bulletin does not authorize any repairs on behalf of Alamo Industrial, its strictly to inform you of New Holland Service Campaign 409.

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



**SERVICE BULLETIN No. 991012**

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |   |  |   |
|--|---|--|---|
| <b>Models: Machete Boom</b>                        |   | <b>Bulletin No:</b><br>991012<br>(Old # 990005A)                               | <b>Date:</b><br>Dec. 10, 1999           |
| S/N MB21-01001 to 01404<br>S/N MB24-01001 to 01196 |   |  |   |
| <b>Parts:</b><br>100 % at Dealer Net               | <b>Labor:</b><br>3.8 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>Hold all Parts involved fo<br>Warranty Return | <b>Termination Date:</b><br>Jun 1, 2000 |

**Turning Arm Pin Update Kit P/N 02974182:**

**Subject:**

Machete Boom Mower Turning Arm Main Pin Retaining Design Update to increase the durability of the main Pin retaining device.

**Service Required:**

1. Secure the tractor to facilitate a safe repair, (Engine off, Park brake on, Key Secured & etc..). You will need a Machete Operators Manual and a Machete Service Manual, these are available from Alamo Industrial. It is recommended that these manuals are on hand.
2. This will require drilling to install a larger Retaining Bolt and welding to install the Snap Ring grooved boss (See Figure 1) on the bottom of the Turning Arm Pin, The Old retaining Bolt at the bottom of the Pin is a 3/8", this will be removed and the hole will need to be drilled out to a 1/2" to accept the new larger bolt.
3. Make sure that the Boom is out stretched and the head is setting flat on the Floor (Ground). Make certain that all hydraulic pressure is relieved from the system, this will need to be done manually at the valve (See Machete Service Manual for this procedure).
4. Support Boom with a hoist as shown in the operators manual and/or service manual before beginning work on retaining pin.
5. From the under side use a 1/2" thick steel plate and a hydraulic Jack up under turning arm pin to prevent the pin from falling out when the retaining bolt is removed. Remove the 3/8" retaining bolt and drill the hole out to a 1/2" hole so you can install the 1/2" Retaining Bolt (See Figure 3)
6. With the new 1/2" retaining bolt installed (do not remove or lower Jack without retaining Bolt installed) lower the supporting hydraulic Jack and 1/2" steel plate but do not remove it. (See Figure 3).
7. Install the new Grooved Snap Ring Boss up under the existing Boss that is welded to the turning arm. Making certain that the OD of new boss is aligned with the OD of the old one, if it is not aligned the ID of the boss's will not be aligned and Pin cannot pass through it. Using the 1/2" steel plate and the hydraulic jack, raise jack till there is enough pressure on new boss to hold it straight and aligned with the existing one. Do Not apply so much pressure that you distort the new boss. (See Figure 4)
8. Weld the new Snap Ring Grooved Boss to the existing boss. Lower the Plate and Hydraulic Jack to remove them. Install the New Snap Ring into the groove of the new boss. The purpose of this snap ring is to keep the pivot pin from dropping out the bottom if the retaining bolt breaks or comes out.



## Service Bulletin 991012 Continued from previous Page

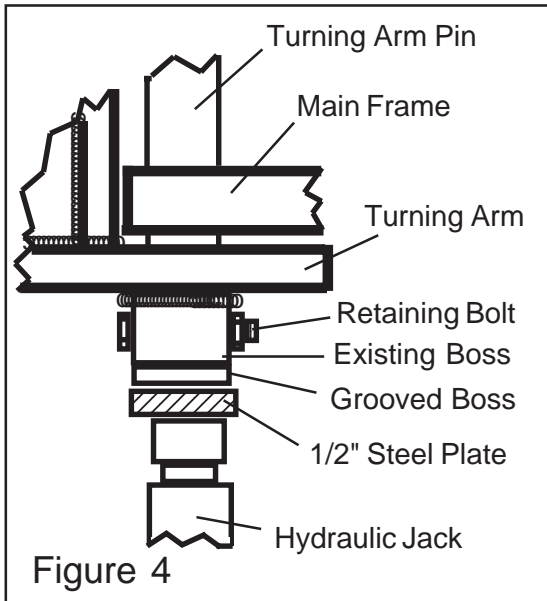
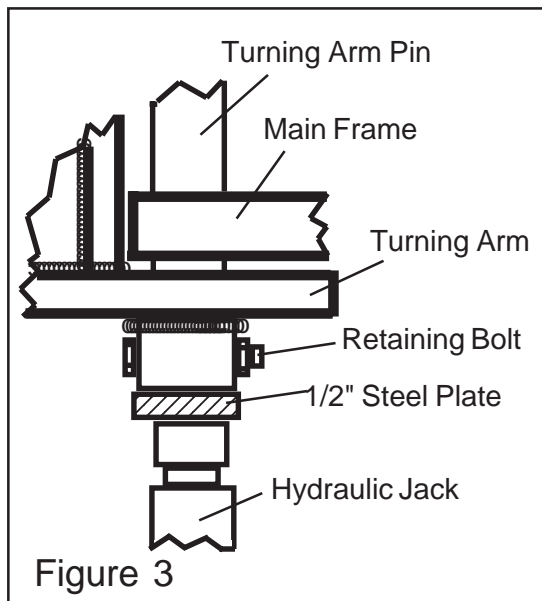
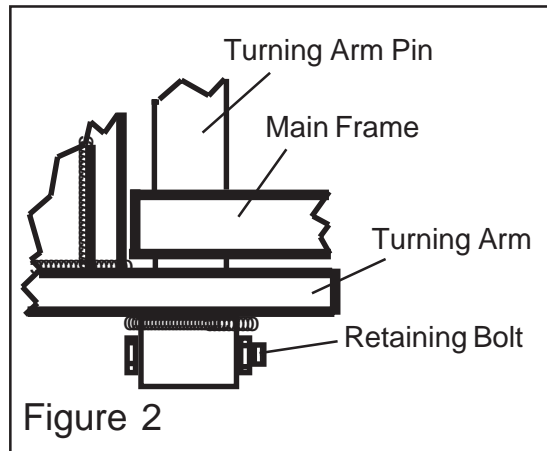
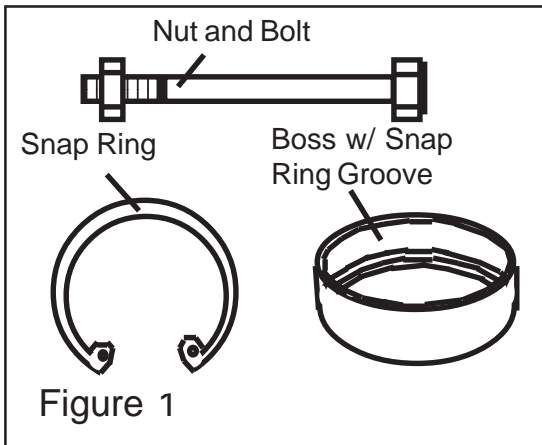
9. Remove Supporting Hoist and all Jacks. Check to make certain Retaining Bolt Nut is tightened, Snap ring is installed and seated into groove. Start and Test movement of Boom trough the Swing functions to make sure it move freely and is not binding.

**Parts Required:** (order Kit #02975672)

P/N 02975672 Kit includes these items

| Part No. | Qty | Description                         |
|----------|-----|-------------------------------------|
| 02975672 | 1   | Turning Arm Update Kit              |
| 63096300 | 1   | Paint, Spray Can, Industrial Yellow |

| Part No. | Qty | Description      |
|----------|-----|------------------|
| 02956765 | 1   | Bolt             |
| 00015800 | 1   | Nut              |
| 02975430 | 1   | Boss With Groove |
| 02975429 | 1   | Snap Ring Groove |



## ***SERVICE BULLETIN*** ***No. 991012***

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

**MACHETE**



**SERVICE BULLETIN No. 002908**

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |  |   |
|---|---|--|---|
| <b>Models:</b> Machete Boom<br>S/N MB21-01001 to 01514<br>S/N MB24-01001 to 01235 |   | <b>Bulletin No:</b><br>002908<br>(Old # 200004)                  | <b>Date:</b><br>Aug. 29, 2000           |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>3.5 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>No Returnable Parts<br>involved | <b>Termination Date:</b><br>Dec 1, 2000 |

**Dipper Boom Reinforcement Plates:**

**Subject:**

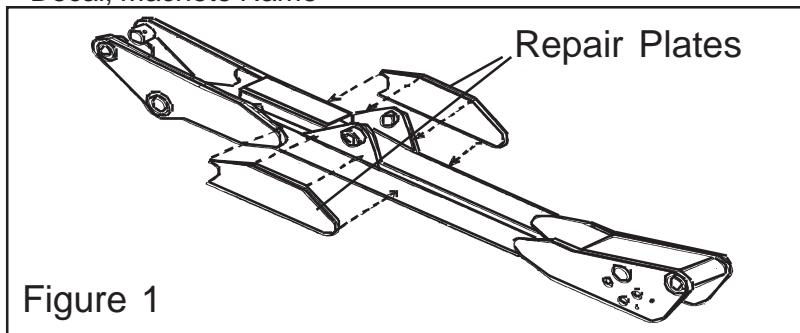
Loads and the resulting stress incurred during heavy to abusive operation of the Machete Boom may allow for fracture of the outer (Dipper) Boom at the welds which attach the base end mount of the Head Tilt Cylinder.

**Service Required:** All outer (Dipper) Booms should be reinforced with the correct Plates welded to both sides of the Boom.

1. Follow any and all safety instructions provided, Operators Manual and Instruction Sheets.
2. Position the Boom so Boom arm is fully extended and mower head is resting on the ground.
3. Secure the Tractor, turn off the engine, engage Parking Brake and remove Tractor Key.
4. Use wire brush to remove the paint from the area to be welded under the head tilt cylinder mount.
5. Clamp correct plates to each side of the dipper arm under head tilt cyl. mount (See Figure 1).
6. Weld the plate completely using 7018 rod or equivalent.
7. Let cool, clean and paint. Reinstall the required decals if desired.

**Parts Required:** (MB21 & MB24 use different Plates & use 2 Plates per repair)

| Part No. | Qty | Description                         |
|----------|-----|-------------------------------------|
| 02976655 | 2   | Repair Plate (MB21 Model)           |
| 02976656 | 2   | Repair Plate (MB24 Model)           |
| 63096300 | 1   | Paint, Spray Can, Industrial Yellow |
| 02968953 | 2   | Decal, Machete Name                 |



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

**MACHETE**



**SERVICE BULLETIN No. 000510**

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |   |  |  |
|--|---|--|--|
| <b>Models:</b> Machete Boom<br>S/N MB21-01360 to 01458<br>S/N MB24-01190 & 01209 |   | <b>Bulletin No:</b><br>000510<br>(Old # 200006)                  | <b>Date:</b><br>Oct. 5, 2000             |
| <b>Parts:</b><br>100 % at Dealer Net   | <b>Labor:</b><br>0.5 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>No Returnable Parts<br>involved | <b>Termination Date:</b><br>Dec 15, 2000 |

**Valve Pressure Filter Kit:**

**Subject:**

A new filter kit P/N 02976069 has been developed and must be installed to help prevent some contamination failures of the control valve system due to normal gear and brake wear within the tractor hydraulic system. This new filter system has an indicator that will show when the filter is plugged, see Technical Information Bulletin 032200 for more detail.

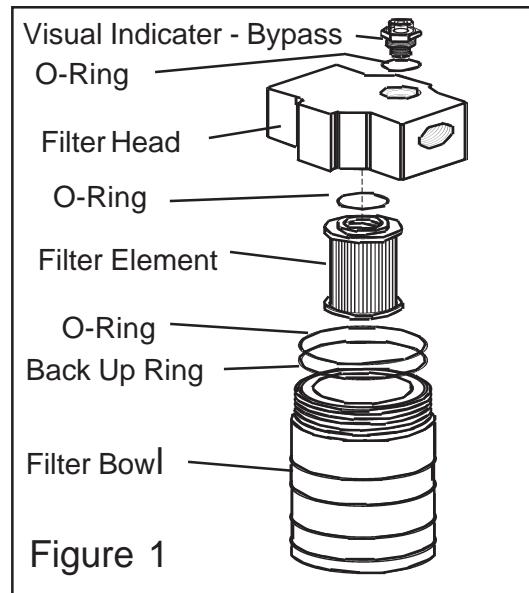
**Service Required:** Use the instructions provided with each kit to install the filter onto the control valve.

**Parts Required:** Order **Pressure Filter Kit P/N 02976069** which includes,

| Part No. | Qty | Description       |
|----------|-----|-------------------|
| 02975187 | 1   | Elbow             |
| 02976066 | 1   | Filter Assembly   |
| 02976068 | 1   | Instruction Sheet |
| 02976076 | 1   | Elbow             |

Above part are include in Kit P/N 02976069

Note: The new filter will mount on the Inlet (pressure) side of the control valve which is mounted on the right hand frame rail. The hardware (Elbows) and instruction sheet are included. Read these prior to beginning any repairs or modifications. Always refer to operators manual for safe procedures when working around equipment.



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.



**SERVICE BULLETIN No. 010607**

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|  |  |  |  |
|--|--|--|--|
| <b>Models:</b> Machete Boom, A-Boom & Slope Mower Models with Buzz Bar Head Option |  | <b>Bulletin No:</b><br>010607<br>(Old # 200102)                                  | <b>Date:</b><br>Jul. 6, 2001             |
| <b>Parts:</b><br>100 % at Dealer Net   | <b>Labor:</b><br>2.5 hrs. at Dealer registered Shop Rate | <b>Old Parts Disposition:</b><br>Hold All Parts for Return under Warranty Policy | <b>Termination Date:</b><br>Sep 28, 2001 |

**Buzz Bar Head Motor Coupler Re-Design:**

**Subject:**

Failures of the Motor to drive spindle molded coupler require inspection of the drive system and possible replacement of the coupler parts.

**Service Required:** The Buzz bar drive system must be updated to the new molded rubber coupling design prior to the implementation of this Service Bulletin. Refer to Technical Information Bulletin 041101 is related to this Service Bulletin.

The drive system will require inspection and possible replacement to ensure proper alignment with the drive sheave.

There has been a design change to the drive coupler assembly for the Buzz bar Cutting Head. If a flexible coupler, Alamo Industrial P/N 02974245 (for Machete) or P/N 02974246 (for A-Boom & Slopemower), are ordered they will be a different design. The new flexible coupler design will be molded rubber with metal inserts. The new molded rubber version will directly replace the machined design using the same part number. An installation drawing, that describes the assembly in detail, will be shipped if a new coupler is ordered. This bulletin is to inform you of the design change. If there are further questions please contact Alamo Industrial's Technical Service Department.

**Parts Required:** Flexible Couple Repair Kits

| Part No. | Qty | Description   |
|----------|-----|---|
| 02974245 | 1   | Flexible Coupler Repair Kit. (For Machete Models)   |
| 02974246 | 1   | Flexible Coupler Repair Kit. (For All Other Models) |

Kits above will include the required parts as well as the required Hardware, The Kits will also include an Instruction Sheet P/N 02977380 which has details on how to perform repairs.

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

**MACHETE**



## **SERVICE BULLETIN No. 021202**

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |   |  |
|---|---|---|--|
| <b>Models:</b> Machete Boom, A-Boom & Slope Mower Models<br>with Buzz Bar Head Option |   | <b>Bulletin No:</b><br>021202   | <b>Date:</b><br>Feb. 12, 2002            |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>5.0 hrs. at Dealer registered<br>Shop Rate | <b>Old Parts Disposition:</b><br>Hold All Parts for Return<br>under Warranty Policy | <b>Termination Date:</b><br>May 20, 2002 |

### **Buzz Bar Head Motor Coupler Coupler Update Kit:**

**Subject:**

Buzz Bar Motor to Spindle drive components may fail prematurely due to misalignment of the Motor and Spindle. Complete instructions for changing Buzz Bar motor to spindle components for Machete, A-Boom, Versa Boom, Slopemower & Rear Mount Boom units will be provided with each Kit.

**Service Required:** Use Information that is included with appropriate kit listed below, to change Drive Spindle, Motor Mount, and Motor Coupler components on all Buzz Bar Head Attachments for the Alamo Industrial Boom Models manufactured before Feb. 2002

**Parts Required:** Two Service Kits are available. (These are major Update Kits)

| Part No. | Qty | Description  |
|----------|-----|--|
| 02978335 | 1   | Coupler Drive Asy Repair Kit. (For Machete Models)   |
| 02978336 | 1   | Coupler Drive Asy Repair Kit. (For All Other Models) |

Kits above will include the required parts as well as the required Hardware, The Kits will also include an Instruction Sheet P/N 02978337 which has details on how to perform repairs. Read these instruction sheets completely before beginning any repairs. If any problems please contact Alamo Industrial Technical Service Department for further details.

NOTE: This Service Bulletin Printed this date Oct. 22, 2003 will void any other version of this service bulletin printed prior to this date. Termination date for this service Bulletin was May 20, 2002.

Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

**MACHETE**



## SERVICE BULLETIN No. 030702

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |  |   |
|---|---|--|---|
| <b>Models:</b> Rotary Heads using Blade Bolt No. 02782900 with Date Code on Bolt of 11-02 & 02782900 Blade Bolts in Parts Stock with the 11-02 date code. |   | <b>Bulletin No:</b><br>030702<br>(Old #1020703)                                  | <b>Date:</b><br>Feb. 7, 2003              |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>Will be evaluated on a case by case basis. | <b>Old Parts Disposition:</b><br>Hold All Parts for Return under Warranty Policy | <b>Termination Date:</b><br>Apr. 15, 2003 |

### Blade Bolt Inspection:

#### Subject:

Quality inspections revealed the potential for cracking of the Blade Bolt. Cracks are the result of manufacturing procedures and will be present on the bolts prior to installation on the mower. This is pertaining to a Date code which is stamped on the threaded end of the bolt, Date Code 11-02.

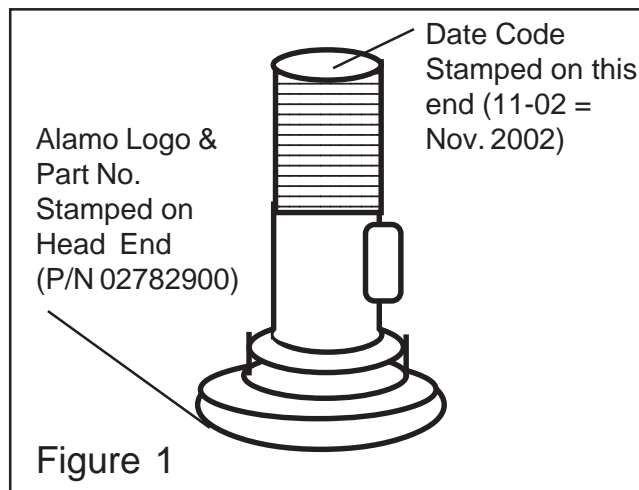
#### Service Required:

1. Inspect all Bolts in Parts stock and those on the effected mowers by checking the dated code on the Blade Bolt.
2. If Blade Bolts do not have the 11-02 date code no service will be required.
3. If the Date code 11-02 is there check the Bolt for any cracks in them, If the bolts are installed on the mower they will have to be removed to check.
4. If they check OK reinstall them and torque them to 600 ft. lbs. and reinstall roll pins.
5. If they have cracks replace them with new ones, install the new bolts and torque to 600 ft. lbs. Reinstall roll pin.

#### Parts Required:

| Part No. | Qty | Description |
|----------|-----|-------------|
| 02782900 | a/r | Blade Bolt  |

Note: Always check Date Code and Part Number of blade bolt before performing any repairs as described in this Service Bulletin as not all Blade will have the same date code. Only Blade bolts with 11-02 date code will be considered for warranty consideration.



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

MACHETE



## SERVICE BULLETIN No. 050504

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-372-2708

|   |   |   |  |
|---|---|---|--|
| <b>Models:</b> A-Boom Rotary Heads, HY15, HY60, MR60 Machete Rotary Heads , Rear Mount Rotary Heads, Versa Rotary Heads, BA60 Heads |   | <b>Bulletin No:</b><br>050504   | <b>Date:</b><br>May. 5, 2004             |
| <b>Parts:</b><br>100 % at Dealer Net  | <b>Labor:</b><br>1 hr. at Dealer registered Shop Rate | <b>Old Parts Disposition:</b><br>Hold All Parts for disposition under Warranty Policy | <b>Termination Date:</b><br>Aug. 5, 2004 |

### Blade Carrier Retaining Bolts:

**Subject:** Due to the Possibility of Bolts that may not meet Alamo Industrial Standard being used in the production process all bolts that meet the Serial Number list below should be changed. This will apply to bolts that were used at factory during assembly process, This WILL NOT include Bolts that were used as replacement parts. If you have a model with the following serial numbers replace the bolts and Lockwashers. Because there are more than one length of Bolt involved it will be required to use the appropriate Parts Manual to determine the Bolt and Washer Number that applies to your model.

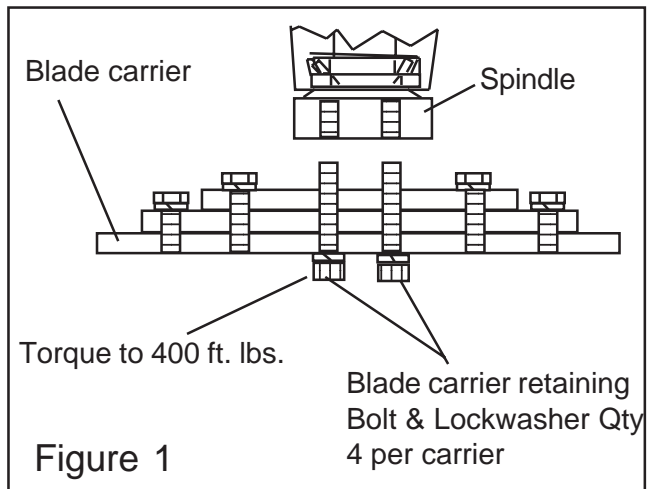
#### Service Required:

1. Remove the Four Allen Head Bolts in the center of the Blade Carrier one bolt and Lockwasher at a time. DO NOT remove all four bolts at one time and DO NOT INSTALL bolts that are longer or shorter than bolts that were removed.
2. Replace one Bolt and Lockwasher, torque it to 400 ft. lbs. then move on to the next bolt.
3. Continued this until all four bolts have been replaced.

#### Parts Required:

| Part No.   | Qty | Description     |
|------------|-----|-----------------|
| See Manual | 4   | Allen Head Bolt |
| See Manual | 4   | Lockwashers     |

|         |                    |   |
|---------|--------------------|---|
| A-Boom  | S/N 06045 to 06071 |   |
| B/A     | S/N 02534 to 02552 |   |
| HY15    | S/N 02416 to 02418 |   |
| HY60    | S/N 01211 to 01211 |   |
| Machete | S/N 01360 to 01364 | & |
|         | S/N 02017 to 02036 |   |
| MR60    | S/N 02035 to 02035 |   |
| RM      | S/N 02405 to 02405 |   |
| Versa   | S/N 05175 to 05178 | & |
|         | S/N 06336 to 06394 |   |



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

### MACHETE



## SERVICE BULLETIN No. 083005-1

Alamo Industrial Technical Services Department  
 1502 East Walnut  
 Seguin, Texas 78155  
 830-379-1480

|  |   |  |   |
|--|---|--|---|
| <b>Models: All Machetes (except on TV140 &amp; 9030 Tractor)</b><br><b>Shipped Between Mar. 1, 2005 and Aug. 19, 2005</b><br><b>All Brahmas</b><br><b>Shipped between Mar. 1, 2005 &amp; Aug. 19, 2005</b> |   | <b>Bulletin No:</b><br>083005-1                            | <b>Date:</b><br>Aug. 30, 2005             |
| <b>Parts:</b><br>100 % at Dealer Net   | <b>Labor:</b><br>0.5 hr At dealers Register Shop Rate | <b>Old Parts Disposition:</b><br>Scrap, No Parts to Return | <b>Termination Date:</b><br>Nov. 30, 2005 |

### Port Plug Update:

#### Subject:

On Machete and Brahma pumps utilizing the new design Servo Solenoid Valve assembly, An incorrect port plug was installed in the port next to the solenoid Valve. This incorrect port plug does not allow oil trapped on the back side of the servo piston to escape to tank, resulting in incomplete shifting of the servo piston and thus incomplete stroke of the pump, causing a noticeable decrease in blade speed and performance. Pumps that need updating can be externally identified by the wire exit direction on the solenoid coil, a rectangular wire connection point on the solenoid coil, and a raised button on the port plug as shown in figure 1.

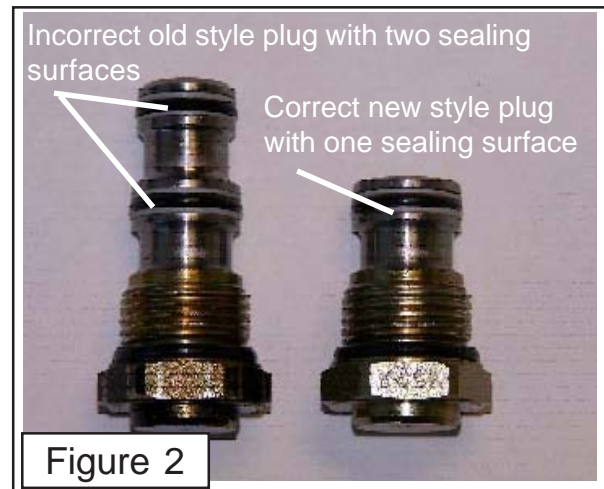
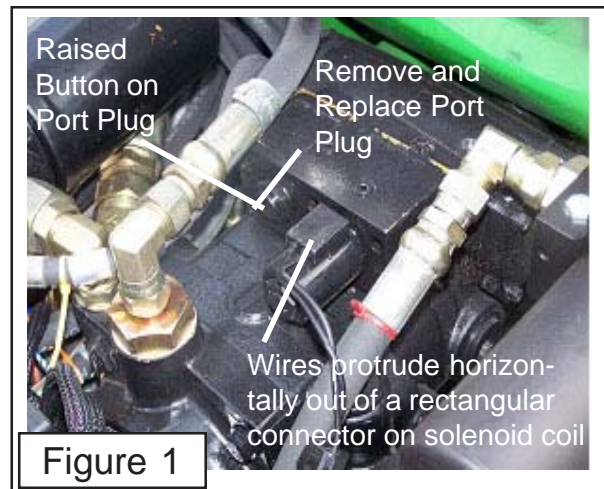
Once the plug is removed from the manifold, the incorrect plug can be identified by the secondary sealing surface and extended length as shown in figure 2.

#### Service Instructions:

Secure the tractor to facilitate safe repair. Thoroughly clean the top of the pump and around the port plug and solenoid valve to prevent contamination from be introduced to the hydraulic system. Remove the port plug as shown in figure 1 and replace with new port plug (P/N 02983170) as shown in figure 2. Run and test mower for operation and hydraulic leaks.

#### Parts Required:

| Part No. | Qty | Description           |
|----------|-----|-----------------------|
| 02983177 | 1   | Port Plug (New Style) |



Warranty Compensation will be provided following proper filing of warranty claim in accordance with the Alamo Industrial Warranty Policy. Claim allowance may vary in accordance with laws governing a specific region. Any Warranty associated with this service bulletin must be within authorized dates.

**MACHETE**







**Machete  
Technical Information Bulletin  
and  
Service Bulletin  
Manual**

**Manual P/N 02980501  
(08/05)**